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THE IDIOMS OF PRACTICE
BRITISH NEUROLOGY, 1880-1960

STEPHEN TREVOR CASPER

UNIVERSITY COLLEGE LONDON

DOCTOR OF PHILOSOPHY

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in memory of joseph engel

*you must go on,
I can't go on,
I'll go on.*

Samuel Beckett

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Abstract

This dissertation analyses the emergence of clinical neurology in Britain between 1880 and 1960. Though it is mainly grounded in archival sources, it also relies upon a prosopography of nineteenth and twentieth century neurologists, a survey of the neurological literature between 1880 and 1960, as well as other primary sources, including: textbooks, newspaper editorials, and articles in the medical press. British neurology emerged in a medical culture philosophically generalist in its values for medical practice and opposed to medical specialisation on these grounds. Rather than contravening that culture, British neurologists initially sought to embrace those values by demonstrating that their practices not only conformed to this culture but were also its highest manifestation. This effort was not without its disadvantages. The result was a paradox of practices. While neurologists located themselves within general medical culture, they also distinguished their practice and knowledge as pre-eminent. On one hand, neurologists produced and reproduced habits and dispositions accenting their specialty's differences. On the other hand, they argued vociferously that they were general physicians of wide knowledge and sound judgement. The outcome was haphazard and contingent. British neurology's practices were marked by fluidity and transience. The specialty was institutionally marginal and the number of practicing neurologists small. Neurology was defined more by events and contexts, such as the formation of neurological societies, the First World War, patronage for neurological research, the Second World War, and the creation of the National Health Service. Thus clinical neurology's emergence was dependent upon its definitions. It was at once the most elite of generalist medicine's many practices; at the same time, it was one of its most marginal specialties.

Abbreviations

ABN	Association of British Neurologists
AABN	Archives of the Association of British Neurologists, London
AMCMA	Alan Mason Chesney Medical Archives
AP	Association of Physicians
ARCP	Archives of the Royal College of Physicians, London
BMA	British Medical Association
BMJ	<i>British Medical Journal</i>
BHM	<i>Bulletin of the History of Medicine</i>
CASC	Archives and Special Collections A.C. Long Health Sciences Library Columbia University, New York
DNB	Oxford Dictionary of National Biography
FRCP	Fellow of the Royal College of Physicians
FRCPE	Fellow of the Royal College of Physicians, Edinburgh
FRCS	Fellow of the Royal College of Surgeons
FRS	Fellow of the Royal Society
JAMA	<i>Journal of the American Medical Association</i>
JHNS	<i>Journal of the History of Neuroscience</i>
JNNP	<i>Journal of Neurology, Neurosurgery, and Psychiatry</i>
JNP	<i>Journal of Neurology and Psychopathology</i>
JRSM	<i>Journal of the Royal Society of Medicine</i>
MRC	Medical Research Council
MRCP	Member of the Royal College of Physicians
MH	Ministry of Health
<i>MHist</i>	<i>Medical History</i>
NA	National Archives, London
NS	Neurological Society of London
PRSM	<i>Proceedings of the Royal Society of Medicine</i>
RCP	Royal College of Physicians, London
RG	Record Group
RAC	Rockefeller Archive Centre
RNP	<i>Review of Neurology and Psychiatry</i>
RSMA	Royal Society of Medicine Archives, London
RS	Royal Society, London
RHUL	Royal Holloway, University of London
SHM	<i>Social History of Medicine</i>
<i>Trans</i>	<i>Transactions of the Ophthalmological Society of the United Kingdom</i>
UCL	University College London
WL	Special Collections, Wellcome Medical History Library, London

Figures

Table 2.1	Titles of 'Neurological' Books Published in Britain	77
Chart 3.1	Membership, Attendance, and Number of Meetings of the Neurological Society of London, 1889-1907	135
Chart 7.1	Total Members Allowed in ABN versus Attendance of Members at First Yearly Meeting	310

Contents

	Thesis Abstract	5
	Abbreviations	6
	Graphs	7
	Contents	8
ONE	Introduction	
	The Idioms of Practice and the Defining of British Neurology	12
	Aims and Problems	14
	The Idioms of Practice	23
	The Structure of this Dissertation	35
TWO	British Medicine and Neurology: Practices in Context	48
	Practicing Medicine in Nineteenth Century Britain	53
	Nerve Practice in Perspective	63
	Practice and the Production of Neurological Knowledge	69
	Producing and Reproducing Ambiguity: Manuals of Nervous Diseases	73
	General Practices in Journals and Societies	82
	Representations of Practice in Obituaries	86
	Practices Producing Neurological Institutions, 1880-1960	93
	Inspecting Interwar Neurological Institutions: W. Russell Brain's Retrospective Report	94
	Analysing Neurology's Institutionalisation Chronologically	97
	The Paradoxical Locations of Practice: A Final Analysis	106

THREE	Continuities in Practice: Medical and Specialist Societies in Britain	112
	Contexts of Practice in Medical and Scientific Societies	115
	Practical Origins: Neurology in the Ophthalmological Society	121
	Medical Practices within the Neurological Society of the United Kingdom	131
	The Temporary Equilibriums of Practice: Between Generalism and Specialism	146
FOUR	Constellations of Practice: Generalism, Specialism, and the Social Parallax of War	156
	The Temporary Ascent of Generalist Practice	161
	The Significance of Head-Wounds: Neurologic Practice in War, 1914-1918	168
	Practice in France: a Case-Study of Gordon Holmes's Research, Patients, and Legacy	174
	The Legacy of Head-wounds for Neurologic Practice, 1918-1923	181
	From General Practice to Special Practice	190
FIVE	Rules of Practice and the Origins of the MRC's Clinical Neurological Research Unit	200
	Biographical Contexts of Practice: Youth, Privilege, and the Social Order	207
	Medical Practice and Scientific Discovery: the Social Relations of Research	224
	Medical Practice and Verification: Through Discipline, Institutions Arise	236
	Institutional Covers, Contexts, and Pretexts: Practices and their Social Orders	247

SIX	The Practice of Prosopopoeia: the Production of the Neurological Field	264
	The Old Idiom	270
	A Meeting of Idioms: The Anglo-American Congress of 1927	272
	Framing Plurality: Conventions and Practices of Taste	280
	The Voices of the Past: the Inscriptions of Practice and the Production of the Field	295
SEVEN	Action and Practice: the Association of British Neurologists, 1933-1965	302
	Sources on the Association of British Neurologists	304
	The Association of British Neurologists: an internal account	307
	Proving Action: Neurological Research at the Association of British Neurologists	314
	Practice without Action: Members without Meetings, 1939-1944	324
	Practice with Action: Members with Meetings	336
	Practice and Action: the Royal College of Physicians and the Emergence of Neurology	340
EIGHT	Conclusion	
	The Defining of Neurology: the Idioms of Practice	354
Appendix A	The Neurological Society of the United Kingdom and Common Membership in Medical Societies, 1880-1907	380
Appendix B	Membership Lists for British Neurological Societies, 1931-1970	396
Appendix C	100 Members of the Association of British Neurologists	406
Appendix D	The 1931 First International Neurological Congress, Bern	455
Appendix E	Bibliography of the Section of Neurology; <i>Proceedings of the Royal Society of Medicine</i> , 1907-1965	458
Bibliography		512

Truth

a home truth: a plain statement of something which is unpleasant but true about a person and said directly to them

to tell the truth: (*inf*) really; actually

truth will out: a saying, meaning that it is impossible to conceal the truth about something for ever

Rule

as a rule: usually

the exception proves the rule: the fact an exception has to be made for a particular example of something proves that there is a general rule

golden rule: the rule which is the most important; do unto others as you would have them do unto you

rule of thumb: a method of doing something by experience rather than theory

rule with a rod of iron: to control severely

Practice

be out of practice: not having had a lot of practice recently

make a practice: to do something habitually

practice makes perfect: a saying meaning that if one practices one will eventually be able to do something well

put something into practice: to do something, as opposed to thinking about it

practice what one preaches: to act or behave oneself as one tells other people they should act or behave

CHAPTER 1: INTRODUCTION

The Idioms of Practice and the Defining of British Neurology

‘A white elephant?’¹

One of my early memories is that of the first paper I submitted to Gordon Holmes as Editor of Brain. He summoned me to discuss it with him one evening at his home in Wimpole Street, and at once launched out upon a critical appraisal – a reference I had failed to notice, a redundant passage, and I was to hear other expressions of the same kind. He would vent the whole of his vast energy to the discussion. Very occasionally, he would break off, say “I’m going to sleep now” and doze waking at the end of 5 minutes with renewed vigour.

Charles Symonds, c.1966

Introduction

In 1934 the American surgeon, Harvey Cushing (1869-1939) wrote to the Edinburgh Moncrieff-Arnott Professor of Clinical Medicine, Edwin Bramwell (1873-1952), and asked, ‘Have there ever been any professors of neurology anywhere in Great Britain?’ Cushing was preparing an address arguing for unity in neurology, neurosurgery, and psychiatry, which he was planning to present at the opening ceremony of the Montreal Neurological Institute. ‘Is it’ he continued, ‘that professors of medicine took in interest in neurology and were loath to give it up to the specialists? Would your father [Byrom Bramwell], for example, have cared to have a neurological unit and give up his general work to the infirmary? And would you have been glad to do the same?’ It was curious,

¹ In popular idiom, ‘a white elephant’ refers to something that is useless and a nuisance, or which causes much trouble while doing little good. It supposedly derives from Thailand, where white elephants were treated like royalty and when gifted by the King to ‘deserving’ subjects, could be ruinously expensive gifts.

Cushing continued, that there had been many professors of mental and nervous diseases in America by the close of the nineteenth century, yet as far as he knew, the first ‘Professorship in Neurology’ was established in Philadelphia only in 1903.²

Edwin Bramwell replied, ‘There has never been, so far as I am aware, a Professor of Neurology in Great Britain’. He then added,

My father had wider interests in various departments of medicine, and he would I know have been loath to give up his general work in the infirmary and take over a neurological unit. I too would be very sorry now, at any rate, to confine myself to purely neurological Hospital material. I always recall a remark of Gowers, who by the way, was at one time Professor of Clinical Medicine at University College, ‘a neurologist must be a specialist, but he cannot be an extremist.’³

Cushing and Bramwell were identifying a paradox. Both men thought neurology had ancient roots. Yet, to both, neurology seemed strikingly modern as an academic discipline, medical specialty, and clinical practice. Moreover, it appeared to them strangely under-represented in medical institutions across the globe. Explaining why and how neurology *could be old* was becoming a dominant practice in the new, emergent specialty.

² Edwin Bramwell Papers [hereafter: Private Collection], Harvey Cushing to Edwin Bramwell, 1 September 1934.

³ [Private Collection], Edwin Bramwell to Harvey Cushing, 14 September 1934.

Problems and Aims

This dissertation explores the history of the Association of British Neurologists and its members within a broader, more critical historiographic context.⁴ To date, the narrative of British neurology has been dominated by celebratory accounts and histories of individual diseases and theories.⁵ Noting the limitations such works have in developing deeper historical perspectives, historian Ellen Dwyer has lamented:

Unfortunately, to date, relative little has been produced [about neurology] on the years since 1918. Although neurology, neuropsychiatry, and neuroscience usually are

⁴ The sources on neurology's intellectual history are extensive. In my opinion, the best are: Owsei Temkin, *The Falling Sickness: A History of Epilepsy From the Greeks to the Beginnings of Modern Neurology* 2ed. (Baltimore: Johns Hopkins Press, 1971); Robert Young, *Mind, Brain, and Adaptation in the Nineteenth Century*, (New York: Oxford University Press, 1970); Anne Harrington, *Medicine, Mind, and the Double Brain: a study in nineteenth-century thought*, (Princeton: Princeton University Press, 1987); Roger Smith, *Inhibition: history and meaning in the sciences of the brain and mind*, (London: Free Association Books, 1992); and L. Stephen Jacyna, *Lost Words: Narratives of Language and the Brain, 1825-1926*, (Princeton: Princeton University Press, 2000). It is striking that James Purdon Martin's reminiscences are some of the only historical accounts we possess about twentieth-century British neurology. See: "British Neurology in the last Fifty Years: some personal experiences" *PRSM* (1971), pp. 1055-1059; idem, "Reminiscences of Queen Square" *BMJ*, Vol. 283 (1981), pp. 1640-1642; also see, R. Langton Hewer and V. A. Wood, "Neurology in the United Kingdom," *JNMP*, Vol. 55 (1992), pp. 2-7.

⁵ See references in the recent critical articles published in the *Journal of the History of Neuroscience*, which have called for a new approach to neuroscience history. F. Clifford Rose, "Historiography: An Introduction" Vol. 11, No. 1 (2002), pp. 35-37; in the same issue, Thomas Söderqvist, "Neurobiographies: Writing Lives in the History of Neurology and the Neurosciences", pp. 38-48, and Helge Kragh "Problems and Challenges in the Historical Study of the Neurosciences", pp. 55-62. Excellent exceptions on neurology's institutional history in America include, Bonnie Ellen Blustein, "New York Neurologists and the Specialization of America Medicine," *BHM*, Vol. 53 (1979) pp. 170-183; *ibid*, "Percival Bailey and Neurology at the University of Chicago, 1928-1939" *BHM*, Vol. 66, (1992), pp. 90-113; *ibid*, "Medicine as Biology: Neuropsychiatry at the University of Chicago 1928-1939," *Perspectives on Science*, Vol. 1 (2005), pp. 416-444.

mentioned in the fast growing historical literature on psychiatry in the twentieth century, they most often appear in relation to psychiatry. Few histories start with neurology and then move out to explore its connections with other medical specialties, including psychiatry.⁶

This dissertation's first aim is to fill part of this gap, by producing an empirically-driven story of individuals and institutions in Britain implicated in the study of the nervous system between 1880 and 1960 – the period in which the medicine and science of the nervous system transformed into professionally autonomous disciplines.

The second aim has been to explain a seeming paradox existing within the historiography of neurology. Depending upon one's historical position, it is possible to represent the results of eighteenth and early nineteenth-century patho-anatomical experiments as classical examples of neurological and neuroscientific research.⁷ This view creates a paradox because institutions and individuals connected with a discipline or specialty of neurology did not exist with any certainty prior to the late nineteenth century, and it is consequently not obvious that grounds exist for classifying experiments or 'discoveries' as neurological per se. Clearly, the socio-cultural meaning and understanding of those

⁶ Ellen Dwyer, "Toward New Narratives of Twentieth Century Medicine" *BHM*, Vol. 74, No. 4 (2000), p. 788. See for a representative example: Joan Jacobs Brumberg, *Fasting Girls: The History of Anorexia Nervosa* (New York: Vintage Books, 2000).

⁷ On this paradox, see Edwin Clark and L. Stephen Jacyna, *Nineteenth Century Origins of Neuroscientific Facts* (London: University of California Press, 1987), and then read, Daniel Kevles and Gerald Geison's response in the "The Experimental Life Sciences in the Twentieth Century" *Osiris*, Vol. 10 (1995), especially pp. 101-107. See ch. 2 of this dissertation as well.

‘discoveries’ changed dramatically over the last two centuries.⁸ Thus although in the eighteenth century, Robert Whytt (1714-1766), Alexander Stuart (1673-1742), and Stephen Hales (1677-1761) independently observed components of reflex action, it is now clear that the social and cultural meanings of ‘the reflex’ changed substantially throughout the next century, mainly because of trends in Western Society towards ‘secularisation’, ‘industrialisation’, and the ensuing ‘transformation’ of science and medicine.⁹ Therefore, this suggests *only* that the concept of reflex action was embedded within changing historical contexts that later acquired meaning and were thus appropriated by neurology’s practitioners in the early twentieth century.¹⁰

Explaining this paradox has meant understanding how and why authors wrote positivist accounts that retrospectively codified past experiments and knowledge about subjects like ‘the reflex’ into a history of neurology.¹¹ It is now common in the history of medicine and neurology to dismiss earlier historical accounts for being whiggish or antiquarian.¹²

⁸ A similar view is advocated by Roger Smith, *The Fontana History of the Human Sciences* (Fontana Press, 1997), pp. 142, 221-222.

⁹ For older approaches to reflex see, Lawrence McHenry, *Garrison’s History of Neurology*, (Illinois: Charles C Thomas, 1969), pp. 112-118; more recently, Sidney Ochs, *A History of Nerve Functions: From Animal Spirits to Molecular Mechanisms* (Cambridge University Press, 2004), 70-72; An important contrast is, David Millett, “Wiring the Brain: From the Excitable Cortex to the EEG, 1870-1940” PhD Diss., University of Chicago, 1998, ch. 2.

¹⁰ My view thus contrasts with that of Jacyna, *Lost Words*, p. 3.

¹¹ The function of positivist discourse is discussed in chapter 8. The need to analyze it has been emphasized by Andrew Abbott, *The System of the Professions: An Essay on the Division of Expert Labor* (Chicago and London: University of Chicago Press, 1988), pp. 59-62 and 319-323.

¹² For example, see Harrington, *Medicine, Mind, and the Double Brain*, p. 5; Jacyna, *Lost Words*, p. 13. More generally, see Roy Porter, *The Greatest Benefit of Mankind: A Medical History of Humanity From Antiquity to the Present* (HarperCollins Press, 1997), pp. 5-6.

Still, any study examining the history of a medical specialty or academic discipline in the late nineteenth and twentieth centuries would be remiss if did not recognise the important functions such historical accounts played in establishing (if not inventing) fields of knowledge.¹³ While the construction of such accounts blurred the boundaries of neurology's practice and knowledge historically, they simultaneously necessitated a new history justifying and legitimating neurology's practices – its distinctiveness and relevance – within a medical culture that commonly held neurology as 'therapeutically destitute'.¹⁴

The last aim has been to place neurology's emergence into a broader discussion about how historians can understand the *practices of medicine*. In contrast to the primary narrative, I present this argument more subtly than the former, revealing it through chapter titles and section headings. Since neurology's emergence is always in the foreground, it functions as a case study for illustrating my broader claim that practices in medicine must be understood as being far more than patient-physician interrelations. For me, practices precede theories, and they therefore are the underlying structures mediating and establishing the foundations of social orders within societies, or communities within societies.¹⁵

¹³ Andrew Abbott, *The System of the Professions*, pp. 61, and pp. 319-323.

¹⁴ "Neurological Therapeutics" *JNP* Vol. XVI, No. 64 (1936), p. 368.

¹⁵ By social orders are meant the idiomatic modalities of power that produce reality and disciplinary normalisation, or as Foucault would have it, the anonymous power that produces 'objects and the rituals of truth.' Michael Foucault, *Discipline and Punishment: the Birth of the Prison* (Penguin Books, 1991), p. 194. I am opposed to the claim that individuals intentionally create or even necessarily know that they are involved in establishing these orders.

For a time, scholars argued that scientific discoveries and the invention of technologies led to changes in medical practices, and some felt these changes in ‘objective knowledge’ led to the formation of new social and cultural institutions, such as autonomous communities comprised of medical specialists.¹⁶ It was written allegorically, for example, of the ‘New Neurology’ in 1899, ‘The changes, as a rule, are slow; they result from the gradual evolution of knowledge in which one discovery rests upon another and the series constitutes a set of stepping stones which bridge a brook or baffling current or may afford the means of ascent to a higher level.’¹⁷ This positivist allegory is useful, for it demonstrates how many practitioners and historians have ideally understood the production of knowledge as *the* salient process involved in forming institutions. However, the underlying assumptions of this position has been treated recently with less reverence in social and historical studies, because such claims neglect broader questions about how and why discoveries were produced and reproduced, invented and re-invented, or socially constructed and constituted in ideological ways.¹⁸ Discoveries in science and medicine do have historical consequences, but evaluating and ‘platforming’ these

¹⁶ Rosemary Stevens, *Medical Practice in Modern England: The Impact of Specialization on State Medicine*, (New Haven and London: Yale University Press, 1966), pp. 26-30; George Rosen, *The Specialization of Medicine with Particular Reference to Ophthalmology*, (New York: Froben Press, 1944). Histories of neurology in this vein include the excellent works by Edwin Clarke and D. D. O’Malley, *The Human Brain and Spinal Cord*, (Berkeley: University of California Press, 1968); Edwin Clark and L. Stephen Jacyna, *Nineteenth Century Origins of Neuroscientific Facts* (London: University of California Press, 1987).

¹⁷ William Gowers, “A Lecture on the New Neurology” *The Lancet* (1899), p. 71.

¹⁸ George Weisz, *Divide and Conquer: A Comparative History of Medical Specialization*, (Oxford University Press, 2006), pp. xi-xxx; Bruno Latour, “On the Partial Existence of Existing and Nonexisting Objects” in Lorraine Daston ed. *Biographies of Scientific Objects* (Chicago and London: University of Chicago Press, 2000), pp. 247-269.

consequences take on a different dynamics. It is a process entailing practices far different from those imagined usually as central in narratives about the origins of scientific and medical concepts.¹⁹

Using the story of neurology's emergence, this dissertation questions these practices closely. In doing so, it examines how nomenclature, like specialist and profession, and black boxes, like specialisation, professionalisation, emergence, or institutionalisation, can frustrate the historian's aims to account for the complexity of the World, a project in which such terms function as idealising constructions.²⁰ Though I use idealising words like those to clarify parts of my primary account, this dissertation explores practices to move beyond the boundaries such terms and boxes create.²¹ By using *practice* as an alternative, though ephemeral, lodestone, it seems possible to revisit the story of late nineteenth and twentieth century medicine, and pose new questions by rereading existing primary accounts as well as previously unexamined materials.²²

¹⁹ Cf. Peter Keating and Alberto Cambrosio, *Biomedical Platforms: Realigning the Normal and the Pathological in Late-Twentieth Century Medicine* (Cambridge and London: MIT Press, 2003), pp. 17-19; with Theodore Arabatzis, *Representing Electrons: a Biographical Approach to Theoretical Entities* (Chicago and London: University of Chicago Press, 2006), pp. 53-69.

²⁰ For the best critique of these categories, see John Burnham, *How the Idea of the Profession Changed the Writing of Medical History* (London: Wellcome Institute for the History of Medicine, 1998).

²¹ On this problem see, Friedrich Nietzsche, *On the Genealogy of Morals*, in ed. and translated by Walter Kaufmann *Basic Writings of Nietzsche* (New York: Modern Library Press, 2000), pp. 593-599.

²² I agree with Pierre Bourdieu's critique that much of the sociology and history of science invests too much capital in scientific texts and not nearly enough in prosopography. 'The absence of any attempt at prosopography condemns them to seek the power of texts in the texts themselves.' However, I believe that texts are important. I am merely suggesting that 'older' methods in the history and sociology of science present interesting and valuable consequences when used with textual analysis. See, *Science of Science and Reflexivity* (Polity Press, 2004), p. 28; William Sewell, "The Political Unconscious of Social and Cultural

One example of the contradictions that arise from studying neurology's practices in context is readily available: the word neurologist is a slippery term, and many have judged cavalierly that the neurologist of the past is easy to identify.²³ A casual selection of sources (often based upon a retrospective understanding of neurology or a view of neurology as an Other to psychiatry) has predominated in the history of neurology, and therefore has tended to oversimplify, idealise, and conceal various practices appertaining to neurology's emergence and the production and reproduction of its values. As will become clear the tasks of source selection and the reading of the sources are not so simple and have ramifications for the telling of the story.

Given its arbitrary nature, by what criteria is it fair to select and locate records about the emergence of neurology? Is it enough to say that authors with interests in neurology wrote them, or that these sources were produced in locations with known neurological traditions? How can sources by Professors of Medicine in Edinburgh – in this case, Byrom Bramwell (1847-1931) and his son Edwin – be justifiably used to tell the story of the emergence of neurology? Likewise, what would qualify as an institution with a neurological tradition? Would, for example, the Central Pathology Laboratory at the

History, or; Confessions of a Former Quantitative Historian" in George Steinmetz ed. *The Politics of the Method in the Human Sciences* (Durham and London: Duke University Press, 2005), pp.173-206.

²³ A useful discussion on the problem with neurology's definition appears in Mervyn Eadie, *The Flowering of a Waratah: the History of the Australian Neurology and of the Australian Association of Neurologists* (Eastleigh: John Libbey, 2000), pp. 41-51; also see, Howard Kushner, *A Cursing Brain: The Histories of Tourette's Syndrome* (Cambridge and London: Harvard University Press, 1999), p. 235, footnote 21; for one solution to this problem, see Abbott, *The System of the Professions*, ch. 9.

Maudsley Hospital qualify as such a place?²⁴ One solution might be to claim that neurology always existed, but that it manifested differently from contemporary understanding. Such a solution does little to resolve the problem of source selection: it may unfairly exclude figures from the process of neurology's emergence or conversely include figures with little more justification than that there is an accepted tradition of them as practitioners in the field.

Though membership in neurological societies has been deemed the appropriate means of identifying past neurologists in this dissertation, and thus source selection, it became clear through prosopography that this means of selection could assume only the most naïve position relative to the actual practices of those members.²⁵ Many members of the Neurological Society of London, for instance, were also members of other societies such as the Royal Society, Medico-Psychological Association, the Physiological Society of the United Kingdom, the Ophthalmological Society of the United Kingdom, and later the

²⁴ Before judging the existence of the *Archives of Neurology from the Pathological Laboratory of the London County Asylums* (Hereafter *Archives of Neurology*) as the only proof required, I would recommend reading, W. J. Collins, 'Preface' *Archives of Neurology* Vol. I (1900), pp. vii-xii; and also, Frederick Mott, 'Editorial Preface' *Archives of Neurology* Vol. II (1903), pp. vii-xiv; both argue that the record of the research conducted at the Pathology Laboratory are 'scientific studies' of mental disease pathology. From this discussion, it is clear that neurology is not per se a clinical pursuit, but rather a generic term for a set of scientific methodologies that are revealing about mental states. Cf. A Baker and F Golla, 'Sir Frederick Walker Mott (1853-1926)' in Webb Haymaker, *The Founders of Neurology* (Springfield: Charles C Thomas), pp. 340-343.

²⁵ For the prosopography, see Appendices A-C. However, membership in a neurological society does not make them neurologists. Prosopopoeia is an effective way of revealing the idealising limitations of such prosopography. As one discovers the voices of the actors, one finds that the prosopographic approach is too idealising. See my obituaries analysis in ch. 2.

Association of Physicians of Great Britain and Ireland.²⁶ Taking one example, George Savage (1842-1921) was a member and President of the Neurological Society of London. He was also an active member of the Ophthalmological Society of the United Kingdom, and President of the Medico-Psychological Association. Because Savage worked in the Bethlem Hospital as resident physician, and he was a consulting physician to the Royal Institution for the Mentally Deficient as well as Lecturer on Mental Diseases at Guy's Hospital, scholars regard him usually as a psychiatrist or alienist.²⁷ Without careful scrutiny, Savage's membership in the Neurological Society might have been taken as immediate evidence for his neurological credentials, when such a classification could be deemed problematic. The interesting question, however, is why would membership in a neurological society appeal to a man like Savage, and moreover what does his membership indicate about the function, purpose, and interests of this new institution that appeared in late-nineteenth century Britain?

The third aim of this dissertation is to explore problems like these further and to resolve them by examining what members of the various British neurological societies were doing and saying, rather than assuming what they were doing is obvious.²⁸ The next section clarifies how such a project can be accomplished theoretically.

²⁶ See Appendix A, Lists A5-A9 and Charts A1-A4.

²⁷ See, for instance, Janet Oppenheim, *Shattered Nerves: Doctors, Patients, and Depression in Victorian England* (New York and Oxford: Oxford University Press, 1991), pp. 40-41; Elaine Showalter, *The Female Malady: Women, Madness, and English Culture, 1830-1980* (London: Virago Press, 1987), pp. 109-110.

²⁸ One of the best considerations of this problem of career explication is Michael Neve and Trevor Turner, "What the Doctor Thought and Did: Sir James Crichton-Browne (1840-1938)" *Mhist*, Vol. 39 (1995), pp. 399-432.

The Idioms of Practice

Because the purpose of this project is to broaden appreciation of how complex the practices of medicine are, and to reveal ways of studying them in context, it is first useful to consider this dissertation's title closely. In sum, *The Idioms of Practice* is a phrase referring to the cognitive (i.e. conscious and unselfconscious) structures, determinants, and processes that order the social world and produce practices, which then subsequently reproduce those same determinants, structures, and processes in future generations.²⁹ Moreover, 'idioms' suggests that practices have an inexpressible, qualitative, and subjective dimension that exists outside objective representations of them, or objective reasons for why and how they are done. I begin by taking up this point precisely and deconstructing the term 'idioms'. I then weave that deconstruction back into a broader discussion about what practices are, how they might be understood, and conclude by suggesting ways they can be reconstructed from primary sources.

In everyday language, *idioms* are colourful expressions deriving from regional dialects and social classes, and they express complex or characteristic styles in art, music, or literature. Idioms are expressions with their own logic, which offer ephemeral qualities of emotionality, tone, and colour to writing and speech.³⁰ Frequently an idiom's syntactical pattern connotes representations far different from literal meaning, but not necessarily in

²⁹ Michel de Certeau, *The Practice of Everyday Life* (University of California Press, 1988), pp. xi-xxiv

³⁰ Geoffrey Nunberg, Ivan A Sag, Thomas Wasow, "Idioms" *Language* Vol. 70 No. 3 (1994), pp. 491-538: They are always conventional, but may also be: archaic, derogatory, euphemistic, facetious, figurative, informal, literary, or negative phrases used in spoken or written situations. *Dictionary of Idioms: An Alphabetical Guide to Colourful and Peculiar Phrases and Expressions*, ed. E M Kirkpatrick and C M Shwarz (London: Wordsworth Reference, 1993), p. vi.

ways analogous to proverbs, similes, or metaphors, because (in contrast with these others, which codify realities through symbolic language) idiomatic speech does not realise or systemise logical realities in language *per se*.³¹ However, ‘idioms have identifiable parts, which are associated with their constituent parts.’³² Idiomatic logics are practical coping mechanisms for ‘producing an infinite number of sentences’ that are appropriately tailored for ‘an infinite number of situations’ in the World.³³ Idioms form the basis of puns and humour, and may communicate irony even within the rules of worldly professional argots, such as the use of the passive voice in the writing of academic and scientific research articles.³⁴ Because they have their own socially constituted logic, idioms are terms and phrases difficult to translate in literature.³⁵ Translation ‘involves interpretation of a foregoing work, and therefore a certain level of dissatisfaction and filling-in’, and idioms are those phrases requiring the most creative involvement of their translators.³⁶

Friedrich Nietzsche argued idealised words were introduced into language to codify the mind-numbing variability presented by the experience of the world.³⁷ If idioms return

³¹ This is not to say that idioms lack logics, but rather to insist that they have their own practical logics.

³² Nunberg, Sag, Wasow, “Idioms”, p. 531.

³³ Bourdieu, *The Logic of Practice*, p. 32, but see pp. 30-33.

³⁴ Sharon Traweek, “Border Crossings: Narrative Strategies in Science Studies among Physicists in Tsukuba Science City, Japan”, in Andrew Pickering ed. *Science as Practice and Culture* (Chicago and London: University of Chicago Press, 1992), p. 434.

³⁵ Walter Benjamin, “Task of the Translator” in *Illuminations* (Pimlico Press, 1999), pp. 70-82.

³⁶ Scott L. Montgomery, *Science in Translation: Movements of Knowledge through Cultures and Time* (Chicago and London: University of Chicago Press, 2000), p. 285.

³⁷ Friedrich Nietzsche, *Genealogy of Morals: A Polemic*, in ed. and translated by Walter Kaufmann, *Basic Writings of Nietzsche* (New York: Modern Library Press, 2000), pp. 495-496.

subjective logics to language, it is important to note that they are still no less idealising or inflexible in the ways they define and cope with the variability and uncertainty of reality.³⁸ Where their individuality lies is in their hidden modes of operation, production and expression, and in the logics or practices that produce both their conventionality and informality. The ways idioms and their logics are produced reveals much about socio-cultural relations generally, and though this is most obvious when the idioms involved are derogatory phrases, many speak subtly to differences in perceptions between the socio-economic classes as well.³⁹

By analogy, it is possible to argue from this deconstruction of idioms, that practices are idiomatic, and moreover it may be added that the reasons people give or will give for their practices are equally so.⁴⁰ Like idioms, practices are conventional, subjective, non-compositional in their modes of operation, often inflexible and rigid, and yet designed to cope with the variability and uncertainty of the World.⁴¹ They are structures with implicit functional purposes but to an outsider the sense of those functions may be ephemeral.

³⁸ Idioms might be termed language tools of ‘misrecognition’. Pierre Bourdieu, *The Logic of Practice*, p. 68, pp. 117-118. Cf. Slavoj Žižek has argued recently that they maybe signs of the incompleteness of reality. Slavoj Žižek, “Master Class on Jacques Lacan: A Lateral Introduction” (lecture 1, Birkbeck Institute for the Humanities, 25th May 2006).

³⁹ The differences between a speaker who utters the phrase ‘as lively as a cricket’ and one who says ‘that’s not cricket’ are worthy exemplars for consideration. Likewise, an American might appeal to ‘thumb tacks’ while someone from Britain might use ‘drawing pin’. Whether the practices of the former speakers are different from the latter ones is difficult to judge; yet, such a study would require consideration of a spectrum of geographic, social, economic, and cultural differences. Nunberg, Sag, Wasow, “Idioms”, p. 495.

⁴⁰ Bourdieu, *The Logic of Practice*, pp. 89-90, 102, 107-108.

⁴¹ Michel de Certeau, *The Practice of Everyday Life*, pp. 91-164.

The ways people produce practices often speak to normative values within social fields as well as social and cultural relations.⁴²

Practices like speaking and categorising are fraught with ambiguities, upon which even careful reflection or reflexivity sheds little light. In his prosopography examining the French academic system, Pierre Bourdieu made this point specifically. He argued that how individuals produce and learn to produce epithets, euphemisms, and innuendo was a question worthwhile exploring scientifically and historically. Using such practices in his case-study, Bourdieu claimed that the ability members of society have for producing phrases that are seemingly innocuous but are in fact ‘manifestly brutal’ in how they categorise others, are signs of deeply-engrained but often ignored socio-cultural practices.⁴³ His more general point was that this was one particular example of how all practices maintained modes of social domination; a way in which symbolic violence (as opposed to violence proper) could be created within a social infrastructure practically justifying the ‘theodicy of its own privilege’ and for that reason visited upon a ‘subject’ in order to structure specifically and ultimately his or her power relations within any social field.⁴⁴

⁴² Bourdieu defines ‘fields’ by what is at stake in them, for example: lifestyle, wealth, education, employment, power, social class, or prestige. Individuals occupy many social fields, and each field has its own conventional logics of practice. L. D. Wacquant, “Towards a Reflexive Sociology: A Work-shop with Pierre Bourdieu” *Sociological Theory* Vol. 7 (1989), pp. 34-42.

⁴³ Pierre Bourdieu, *Homo Academicus*, (Polity Press, 1988), pp. 197 and 235-236; idem, *The Logic of Practice*, pp. 30-32.

⁴⁴ Bourdieu, *The Logic of Practice*, pp. 128-134, quote on p. 133. We must understand that Bourdieu was questioning the status of his own social mobility. He was ultimately asking whether individualism was possible; contrary to at least one view of him, I think his answer was no. Cf. Julien Vincent, “The

Such socio-cultural practices may appear as overt prejudices. Intentionally or not, social determinants like class, race, religion, disability, or gender, have privileged or excluded individuals from achieving statuses or pathways in professional worlds, including medicine and science.⁴⁵ Taking a general example from this dissertation, locating a woman in the history of British neurology between 1880 and 1960 (and after) is unusual, and this fact reflects the existence of barriers that have traditionally prevented women from entering medicine and neurology.⁴⁶

More often determinates are more seemingly innocuous, and in many communities they do not function in so exclusionary a manner, but rather place limitations on the agency individuals have in rising within the ranks of their field. External realities often impose limitations (there were, for example, few positions in universities and hospitals for neurologists in the 1950s). However the way in which those external conditions are negotiated with – in other words, who got the position when it became available *or* who got to write the history of why and how someone got that position – points to the existence and practices of internal hierarchies of power within professional communities

Sociologist and the Republic': Pierre Bourdieu and the Virtues of Social History", *History Workshop Journal*, Vol. 58 (2004), pp. 129-148.

⁴⁵ By 'social determinant', I mean the unwritten logics of social prejudices. At this point, a definition of class is warranted. Class in this dissertation cannot be understood as being solely economically determined – almost everyone appearing in this dissertation was middle or upper class. Class is determined here by the amount of power a member of the community possesses. For me, an editor of an established academic journal, for example, would qualify as an individual with great power. On gender and disability determinants in medicine, see: Susan Wendell's comments in *The Rejected Body: Feminist Philosophical Reflections on Disability* (New York and London: Routledge, 1996), pp. 117-138.

⁴⁶ For a discussion see Michele Stokes, "A Measure of the Elite: A History of Medical Practitioners in Harley Street: 1845-1914" Ph.D. Diss., University College London 2004. pp. 320-371.

like neurology. These hierarchies are self-selective, and reproduce themselves, consciously and unselfconsciously, by selecting individuals most likely to reproduce the social determinants that already exist and define the field. This implies that ideological states of practice flourish within and without professional communities.⁴⁷ These states of practice have ‘logical effects which are inseparable from political effects’ since they shape, among other things, the community’s ideals of excellence and merit – and these ideals invariably conform to those dispositions, appreciations, and habits already marking the socially-dominant class within a field.⁴⁸ The idiom, ‘the name of the game,’ develops the point further, indicating what is intuitively obvious: the presence of accepted rules for success, both stated and un-stated.⁴⁹

What might such dispositions and appreciations look like in neurology? Though several examples could be given, one comment in a 1920 editorial in the newly established *Journal of Neurology and Psychopathology* is revealing and highlights characteristics that were supposed to typify the neurologist:

More than ever must the neurologist be a man of culture and of aspirations, a savant in the right sense of the word, who can see his subject whole, and appreciate contributions

⁴⁷ Bourdieu, *The Logic of Practice*, ‘The very life-style of the holders of power contributes to the power that makes it possible, because its true conditions of possibility remain unrecognised, so that it can be perceived not only as the legitimate manifestation of power but as the foundation of its legitimacy.’, p. 139.

⁴⁸ Quote in Bourdieu, *Homo Academicus*, p. 204; see also: Bourdieu, *The Logic of Practice*, pp. 109-110; Bourdieu, *Science of Science and Reflexivity*, pp. 56-57.

⁴⁹ This argument is neither anachronistic or a conspiracy theory; the point is that all are implicated in someway in this social game. Ultimately, success professionally and socially is determined by a number of practices, each requiring careful consideration.

from whomsoever they come. He boldly takes its vegetative, sensorimotor, and psychical aspects alike for his province, and will not relinquish any section of the field to deputies.⁵⁰

There are subtexts in this comment alluding to practices that the ‘successful’ neurologist should cultivate. Firstly, it is remarkable that ‘the right sense of the word’ was supposed to be easily understandable by the editorial’s readers (whether it was understandable is another matter). The successful neurologist, a man, would possess cultural appreciations transcending medicine’s meagre intellectual limits; culture inspired him – i.e. presumably culture in the ‘right sense of the word’. Cultural appreciation suggested fluency in languages, a convenience, since the neurologist read contributions from ‘whomsoever’ they came. At the very least fluency in French and German was expected.⁵¹ This suggested a higher degree of education than might be expected from the normal crop of medical students or even more ‘second-rate’ neurologists. Finally, there was the throwaway comment about ‘deputies’ in other fields, a statement denoting a hierarchical view of the neurologist’s status within the social field of medicine. Taken together, these views were indicative of underlying dispositions and appreciations that were inseparable from neurology’s practices and therefore, as the final remark about deputies alludes, inseparable from its political logic and ideology.

⁵⁰ “The Realm of Neurology” *JNP* Vol. 1 No. 1, (1920), pp. 67-69, 68. It is worthy pointing out that such a figure – an ideal type – may have never really existed in neurology, but that is a point of debate and not an otherwise useful digression.

⁵¹ On this point further, see F M R Walshe, “Training of the Neurologist” *Archives of Neurology and Psychiatry* Vol. 29 (1933), pp. 379-381.

Pierre Bourdieu termed the production and reproduction of logics like these, the ‘consecration of the social order’, by which he meant that there existed a hierarchically determined but idiomatic ‘system of shared social dispositions and cognitive structures’ that generated perceptions, appreciations, and actions that he regarded as best practices.⁵² Best practices – perhaps understood by the idiom ‘practice makes perfect’ – were those preferred by and distinguishing the ideological tastes of the dominant class. Bourdieu called these ideological states of practice *habitus*, and argued that the generative properties of practices allowed them to possess a subtle spatial and temporal malleability.⁵³ In other words, practices adjust slowly to adapt to the World’s dynamic characteristics. From this perspective, those possessing the most privileged practices would continue to find (and be surprised by the fact) that their social status and position had a staggering historical continuity with preceding generations.

That this consecrated social order consciously and unselfconsciously judges the ability ‘a subject’ has for approximating practices, means that his or her social status in a medical specialty like neurology is determined by the extent he or she approximates to *what is approved*. Sometimes what is approved is stated overtly, but usually it is experienced implicitly. In one extreme overt case, the neurologist Gordon Holmes (1876-1965) once chastised his House Physician, Charles Symonds (1890-1978), for using a pedantic word, a peccadillo resulting in Symonds’ arm being twisted violently as he was shouted at:

⁵² Bourdieu, *Homo Academicus*, p. 204.

⁵³ Ibid., pp. 147-151; 279 ft. 2; Bourdieu, *The Logic of Practice*, pp. 52-65, 53.

‘Don’t use long words like that! Describe what you observe!’⁵⁴ Symond’s slightly older peer Francis Walshe (1885-1973) echoed this episode more generally when he recalled of his training by various figures at the National Hospital for Nervous Diseases, ‘we all loved the hand that chastened us’.⁵⁵

Yet, another case of approximating *what is approved* (though this one is more implicitly felt) is a subject’s capacity to write at an officially accepted standard.⁵⁶ Success in neurology in the past, just as in science, medicine, and the humanities more generally, occurred partially in the practice of writing – i.e. the ability to produce acceptable sentences approximating those marking success. The neurologist Macdonald Critchley (1900-1997) once claimed that ‘whatever command’ he possessed ‘of the Queen’s English is due to my one and only teacher of style, Gordon Holmes’.⁵⁷ At the time of Critchley’s training, Holmes was editor of Britain’s most prestigious neurological journal, *Brain*.

⁵⁴ Special Collections, Wellcome Medical History Library, London (hereafter WL), PP/CPS/3 Memory of Gordon Holmes – handwritten; Folder: ‘History of Medicine; notes, reprints, correspondence, obituaries, etc c.1964-1976’.

⁵⁵ MS ADD 301, University College London Special Archives and Collections (hereafter cited as UCL, Francis Walshe Papers) The National Hospital Festival Dinner, 4 November 1957, folder B5, Francis Walshe Papers.

⁵⁶ Bourdieu, *The Logic of Practice*, p. 125. It is interesting to contemplate why so-many English-speaking students are told to read E.B. Whites’ style manual. The rule seems to be that the student is unclear always, though, of course, it seems plausible that the ‘teacher’ might be out of touch. I think the same problem predominates with the academic peer review process.

⁵⁷ Macdonald Critchley, “Gordon Holmes: the Man and the Neurologist” in *The Divine Banquet of the Brain and Other Essays* (New York: Raven Press, 1979), p. 233.

Writing is a social game, but most people understand from this game, that what they say in writing is not nearly as significant as how they say it. As the neurologist Francis Walshe remarked in a retrospect of his career, ‘it is as well to know how to express one’s self clearly, and writing can be an immense pleasure.’ He then added, ‘as the years passed my writings became predominantly critical and have so remained, though no plaudits greet the critic. The task is its own reward.’⁵⁸ Of course, by the time Walshe had reached his most critical stage, he had replaced Gordon Holmes as *Brain*’s Editor.

Many authors often begin and work with different reasons then they report eventually. Bourdieu has suggested in his analysis of scientific writing, that:

One knows the truth of what one does (for example, the more or less arbitrary or in any case contingent character of the reasons or causes which determine a judicial decision), but to keep in line with the official idea of what one does, or with the idea one has of oneself, this decision must appear to have been motivated by reasons, and by reasons that are as elevated (and juridical) as possible.⁵⁹

The understanding that these reasons exist, and the uncertainty involved in approximating them in the approved manner, suggests yet another way practices structure success. Again as Francis Walshe remarked in his Retrospect, ‘Authority, of course, is essential in science. Yet sometimes our Homers nod and our emperors go abroad with no clothes on,

⁵⁸ UCL, Francis Walshe Papers, Francis Walshe, typescript, ‘Retrospect – a Life in Neurology’ for *Brain* Vol. 88 (1965) in folder A1.

⁵⁹ Bourdieu, *Science of Science and Reflexivity*, pp. 24-25.

but the young are not encouraged to draw attention to these human frailties.’⁶⁰ Contemporary cultural theorists have echoed these candid remarks of the retrospectively contemplative neurologist. Slavoj Žižek has noted, for example, that the symbolic substances of our lives, allows us to realise that ‘unwritten rules that effectively regulate our speech and acts’ exist.⁶¹ Without following Žižek into realms too subterranean for historical analysis, it is possible to sense that these rules exist, or more precisely that idiomatic logics of practice with their own modes of production and operation exist with every social arrangement.

If the historian has any place within this discussion at all, it is in establishing the historicity of these idiomatic logics of practice, in analyzing the various structures that have emerged from their wake, and finally to highlight ways subtle changes in them have occurred and caused ripples within established social orders. Few overt signs of these practices will be visible immediately but there are explicit signs and implicit subtexts marking their sublime, idiomatic constancy throughout all primary sources. The more difficult problem is realising their existence and finding a language to reconstruct them, for the ‘tacit’ is far from easy to make material in an empirical way.⁶² Sources have practices embodied within them, and we can infer their existence in remarkable ways, yet often sources are signs of processes only. The story of those processes – their history –

⁶⁰ UCL, Francis Walshe Papers, Francis Walshe, ‘Retrospect – a Life in Neurology’ *Brain* Vol. 88 (1965) in folder A1.

⁶¹ Slavoj Žižek, ‘Melancholy and the Act’ *Critical Inquiry*, Vol. 26, No. 4 (2000), pp. 657, 681. Note that though he does appeal to ‘cognitive structures’, Bourdieu avoids reference to Lacan in *The Logic of Practice*; he makes only tacit reference to him in *Homo Academicus*.

⁶² See my brief, if somewhat whiggish, note on reconstructing a joke in neurology through source criticism, “British Neurology, 1920-1965: A Neurologist’s Labours”, *World Neurology* Vol. 20, No. 4 (2005), p. 12.

misdirects attention to an ideal set of justifications for the processes. The study of practices, on the other hand, forces us to question those ideals critically to locate and expose their undercurrents.

Hence, the various stages of the 'nerve practitioner' (from his or her entrance into the practice, involvement in medical research and profession, to penning reflections and writing official histories) can be detected within primary records. Historical accounts, institutions, scientific discoveries, instruments, medical students turned practitioners, case notes, surviving patients, pedagogical devices, laws, and the descendents of deceased practitioners, will leave enduring traces of practices. Each will have its own history, and each will be a sign of practices, which, with care, we can reconstruct. In order to explore practices and their historicity, the historian must use sources to reconstruct the underlying appreciations and dispositions defining the social orders that made and kept them. By doing so, it is possible to reconstruct the underlying ideological states of practice that defined processes such as the emergence of neurology. Moreover, by noting the conscious and unselfconscious structures maintaining those orders, it is possible to understand what physicians aspired to keep, even as they attempted to change their practices to match the contingent world in which they inhabited.⁶³

⁶³ Through a study of the idioms of practice, the nature of medicine, i.e. the dynamic nature of its various practitioners, structures, and determinants, can be explored in the light of what it did, and why and how. From this study, one implication may become clear: In the western world, the practices of medicine are mirrors into the human condition, for medicine's signs of practice are found above all else in its languages. Though often disguised in the codes of diagnosis and prognosis, medicine's languages are really languages of hope and despair, life and death, and ultimately the desire to live. In other words, medicine now governs a most precious linguistic space between life and death. Its privilege, and by consequence what its practices seek to maintain, is ultimately the right to create the languages of in-between. Medicine is the modern

The Structure of this Dissertation

By using the story of British neurology's emergence from medicine as a case study, this dissertation uncovers some of the substance of practices in medicine, and shows ways in which historians may analyse them. Practices have their own logics, and they structure and invent retrospective perceptions which appear in various places and are often not correspondent to realities that the historian reconstructs from primary sources. Yet, comparison between those invented (or idealised) perceptions about the past, and the narratives that arise from careful analysis of primary records, reveals some of the substance and reasons for the idiomatic logics of practice that produced both sets of sources.

My analysis of neurology's idioms of practice begins in the nineteenth century. Then a growing group of medical practitioners and academics working within various institutional environments became interested in physiological observations about the function of the nervous system and the pathological manifestations of nervous and mental diseases. The majority were in London or Edinburgh, though there were a few scattered across the larger provincial cities of England and Scotland. Although a few of these physicians in London held appointments in one of the Capital's three specialist hospitals for epilepsy or paralysis, most worked in larger general hospitals while maintaining general private practices as well, where they saw patients with various conditions. It was from this general medical background along with growing interest in the physiology and

language of destiny; what little control it may offer along the way is merely the palliative to an unpreventable but knowable end.

pathology of the nervous system, that those later identified as the pioneers of British neurology originated.

However, neurology, like many medical specialties, had various contexts for its origins. Finding threads of its practices and intellectual traditions in developments during the late eighteenth and nineteenth century is possible; and indeed Thomas Willis (1621-1675) coined the word 'neurology' in the late seventeenth century.⁶⁴ Nevertheless, it is mainly in the contexts of the nineteenth century transformation in the practices and organisation of medicine in Europe, that we should look for and locate the origins of specialists in nervous diseases. Briefly, one of the hallmarks of medicine's nineteenth century transformation was the codification of its knowledge and practice into occupational divisions of labour. Various external factors have been cited in the formation of these divisions, including: progress in knowledge, changes in technology, increasing urban populations, a preference for rationalisation within administrative structures, popular ideologies of progress, and increasing public demand for the services of medical specialists.⁶⁵ There were probable intra-professional reasons for specialisation as well, including, increased social prestige, economic rewards for specialists, and a sense that the rapid increases in knowledge made it impossible for the physician to know everything. More important though was that these changes in medicine's overall structure mirrored general trends in the ranks of industry and middle-class professional society at this time.

⁶⁴ William Feindell, "The beginnings of neurology: Thomas Willis and his circle of friends", in *A Short History of Neurology*, pp 1-18.

⁶⁵ George Weisz, *Divide and Conquer*, pp. xi-xxx.

In Britain, this move towards specialist practice was contested and fraught with ambiguity. Even as specialist hospitals were being founded with increasing frequency throughout the country in the nineteenth century, the general perspective of medicine's elite and non-elite practitioners alike was one of qualified disdain for specialisation and prejudice towards specialists. Although many physicians engaged in medical research, their research was often into various conditions and went in diverse directions. William Broadbent (1835-1907), for example, a Physician at St. Mary's Hospital, was thus alarmed to learn that some of his research had landed him the dubious title of 'cancer specialist', when, in fact, he had published several reports on various subjects, including many 'memorable contributions' on the nervous system.⁶⁶ Like many of his colleagues with interests in the nervous system, Broadbent would have been equally disdainful of the title 'neurologist' – a word originating from the 1830s but one that seems to have been used rarely until the twentieth century.

At the close of the nineteenth century, the specialist in nervous diseases was becoming a more common member of the crowded corridors of British medicine. Across the Atlantic Ocean, and earlier, the American Civil War had been filling hospitals and dispensaries with soldiers afflicted by injuries of the central and peripheral nervous systems, which had resulted in increasing interest in those conditions. Scholars have viewed the unique environment of American medicine as favourable to medical specialisation, and it is true

⁶⁶ M. E. Broadbent ed. *The Life of Sir William Broadbent*, (London: John Murray, 1909), pp. 92-93, quote on p. 297.

that by 1875 physicians had founded the American Neurological Association.⁶⁷ Retrospectively it is clear that a similar story was occurring closer to home. Medical students had been flocking to Paris to spend time training in 'neurology' under Jean-Martin Charcot (1825-1893). Charcot had been appointed to La Salpêtrière in 1862, a hospital remembered as a veritable 'museum of neurological material,' and by 1892, he held the world's first Clinical Chair of Diseases of the Nervous System in the Paris Faculty of Medicine.⁶⁸ Renowned as a Lecturer on Nervous Diseases, Charcot would present neurological cases to his students, highlight their interesting symptoms and distinguish those characteristics required for making proper diagnosis. By far his most famous cases were patients suffering from a condition known as hysteria – a condition now usually relegated to the realm of psychiatry.⁶⁹

To what degree these changes abroad were influencing the research and treatment of nervous diseases in Britain is difficult to know. Certainly, by the 1880s, international communication of physiological and pathological research on the nervous system was common, as were translated textbooks of nervous diseases. The Sydenham Society, for

⁶⁷ Douglas Lanksa, T A Chumura, and Christopher Goetz, "Part 1: The History of 19th Century Neurology and the American Neurological Association," *Annals of Neurology*, Vol. 53 (2003), S2-S26.

⁶⁸ Quote in Lawrence McHenry, *Garrison's History of Neurology*, pp. 254-257; for a discussion of Charcot's Chair see Christopher Goetz, Michel Bonduelle, and Toby Gelfand, *Charcot: Constructing Neurology* (New York and Oxford: Oxford University Press, 1995) pp. 222-231.

⁶⁹ Mark Micale, *Approaching Hysteria: Disease and its Interpretations* (Princeton: Princeton University Press, 1995).

example, had translated Charcot's lectures on the diseases of the nervous system into English by 1881.⁷⁰

In spite of these international and local developments, a tremendous ambiguity surrounds the practices of the specialist in nervous diseases in Britain in the late nineteenth century. What exactly these specialists did, what the objects of their researches were, and what treatments they offered, remained murky. Often 'diseases of the nervous system' functioned as a euphemism for mental diseases as well, and in the minds of many physicians, it was unclear why there should be any distinction at all. With only little restriction of specialist practice, and none over 'nerve practice' specifically, there was little preventing physicians from specialising in nervous diseases, and nothing preventing them from defining their specialty in ways most convenient for their private practices.⁷¹ Interestingly few physicians seem to have done this, and instead many of the physicians remembered now as pioneers in neurology, embraced a view of themselves as elite general physicians with a diverse range of expertise that included knowledge of the abstruse disorders of the nervous system, in all their manifestations.

Chapter 2 of this dissertation explores this observation further, and notes a general transformation in the status of 'neurology' during the period concerned with a focus on the vicissitudes and constructions of neurological practices. Initially neurological knowledge was the apogee of generalist medical understanding and not regarded as the

⁷⁰ J M Charcot, *Lectures on the Diseases of the Nervous System* (New York: Hafner Publishing Company, 1962), iii.

⁷¹ Derek Denny Brown, "Definition of Terms: Great Britain" in *The Founders of Neurology*, xx-xxi.

knowledge of a medical specialty *per se*. A tendency to emphasise the broadness – the all-encompassing spirit – of neurology’s definition and domain predominated throughout this period. Yet, as departments of nervous diseases, and then neurology, began to be formed within the general hospital system, neurology’s definition became more restricted to physical complaints of the nervous system only, though seeing patients with functional complaints remained a common practice. As this chapter shows, the effect of this restriction is now visible in various primary sources for the entire period.

This process of restriction was one almost entirely controlled by external agents, and characteristically these physicians made few attempts to campaign politically on behalf of their specialty. Their disdain for political negotiation, and their general desire to remain within the folds of general medicine, contributed to a crisis that eventually emerged in the 1950s under the new National Health Service (NHS). It became clear then that British neurologists had not succeeded in making their specialty appear necessary either to the British government or to the medical fraternity. As will become clear, the result of opting for a fluidity of definitions in practice led many neurologists to feel politically and institutionally marginalised by the 1950s. This was not case, but why it seemed to be is an interesting question, and one explored in the subsequent chapters.

The remaining Chapters explore specific episodes in this same period that reveal ways physicians began defining neurology by seemingly restricting its practices. In the late nineteenth century, physicians were comfortable defining neurology in the broadest of terms, and few desired that it should have equivalent status with other emergent medical

specialties such as ophthalmology. In retrospect, the irony of this approach was that discussions about nervous diseases arising in the Ophthalmological Society of the United Kingdom partially stimulated the foundation of the first British Neurological Society. Chapter 3 examines many interesting overlaps that existed between the Ophthalmological Society and the Neurological Society of London, and it suggests that the formation of the former provided stimulus for the foundation of the latter. The practices of both owed much to earlier characteristics of medical societies, which had been around since the late eighteenth century; but whereas the Ophthalmological Society was resolutely unapologetic in its aims politically, the Neurological Society by contrast sought to define its membership and subject loosely, and to locate its practices within those of general medicine. Medicine, it was felt by these physicians, should remain whole. Thus, the general physicians frequenting the Neurological Society's meetings did not think of themselves as specialists *per se*, but saw themselves as general physicians of broad scientific – especially physiological – and medical interests. This self-presentation allowed these physicians to tout neurological knowledge while simultaneously aligning themselves with the mores of a medical culture hostile to specialisation. Nonetheless, one reason the members of the Neurological Society could occupy such relative ground was because they formed a kernel of general medicine's leadership – some, for example, were President's of the Royal College of Physicians London. Forty-three were members of the Royal Society.⁷² Even if it had been desired, a political movement defining a specialty of 'neurology' was unnecessary, and it would have unsettled their professional security. Moreover, contesting the practices of medicine's social order by seeking to carve out an

⁷² See Appendix A: List A5 and Lists A10-13.

autonomous field within medicine, meant contravening those very practices responsible for placing them within medicine's most elite echelons. The privilege of occupying middle ground allowed their specialist interests to function as signs of higher aptitudes in medical practice; theirs was therefore actually an ethos greatly at variance with that possessed by would-be specialists. In the late nineteenth century, physicians' interests in 'particulars' were the distinguishing hallmarks of general capability. On the other hand, to be regarded as a 'specialist' before 1914 in British society was tantamount to admitting limitations in ability.

Nonetheless, the uncertainty of determining who the generalists with specialist interests were (versus the specialists possessing generalist aptitudes) created tensions between the traditional values of general 'bedside' medicine and the emergent idioms of social rationalisation, then promoting medical specialisation. By 1906, the opposition to medical specialisation had become so intense that calls to unite medicine reached a veritable social zenith a year later in the formation of the Royal Society of Medicine. Scholars have often read the existence of this new society, in effect described as an amalgamation of various specialist societies in London beneath one roof, as explicit endorsement of specialisation. It was nothing of the kind. The incorporation of those various societies effectively curtailed those former specialist societies' political autonomy, financial independence, and removed their right to copyright their proceedings. However, what is important to consider in the case of the membership of the Neurological Society, is why there was no controversy at all about the society's dissolution into the Royal Society of Medicine's Section of Neurology. Chapter 4

assesses what impact this movement towards medical generalism had for specialist practice generally and neurological practice in particular. By examining the proceedings of both the Royal Society of Medicine's Section of Neurology and the Association of Physicians of Great Britain and Ireland (another generalist society founded in the same year), it becomes clear that the conditions of the First World War transformed the generalist culture of medicine. In effect, very few of the changes wrought by this transformation resulted in immediate structural changes in medicine advantaging medical specialties, nor was the much-hailed revolution in medical knowledge resulting from War-time research much in evidence. Whereas before the War, general physicians with interests in neurology were common, by the 1920s a new younger generation of physicians became self-described neurologists. This move was the product of a utilitarian transition in British society; one befitting the British political and social establishment's needs for rationalisation, efficiency, and economy in medical practices under Total War, and one re-scripted later by practitioner-logic as a revolution in medical practice and therefore a change in science and understanding. This social alteration – a conversion that *slowly* occurred in the interwar period – was integral for neurology's emergence and its subsequent contradictions; it was one also indicative of a rupture with medicine's former generalist ethos.

Embedded as it was within the former ethos of medical generalism, neurology's leadership in the interwar period struggled to fit their former values within the new frameworks of rationalising medicine. This situation created contradictions: with much of Europe devastated by the War, British neurology in the interwar period achieved

remarkable international status, and the clinical methods and research, especially those taking place at the National Hospital in Queen Square, was romantically adulated abroad. Yet, domestically there were signs of insolvency. A small, interwar-period neurological research project funded by the British Medical Research Council (MRC) led to a surprising discovery promising a potential cure for multiple sclerosis. This quickly avalanched into a scandal, as it emerged that one of the neurologists overseeing the research had been using its results in his private practice without the approval of his peers or the permission of the MRC. As a result, the MRC established a Neurological Research Unit at the National Hospital for Nervous Diseases, Queen Square, supplemented by further grants from the Halley Stewart Trust for research fellowships in neurology. This episode, explored in Chapter 5, not only highlighted the enduring institutional ambiguities of neurology but also the contingency of medical research in this period. In many ways, those ambiguities resulted from continued adherence to the values of medical generalism by established figures within medicine, who were simultaneously seeking to change medicine to fit the conditions of the new age. Thus, the interwar environment promoted changes in medicine's structure and function, but internally those changes were nonetheless constrained by the established inclination for social reproduction – the desire to produce and reproduce the best practices of the previous age.

The foundation of this Research Unit, enshrined as it might easily be in a tale of progress, can be read as an act of administrative cynicism – though, in fact, the agency of everyone involved is highly questionable. The actions of one neurologist had revealed the potential thinness of the whole community's integrity, and show-cased the community's inability

to internally exercise political control over its membership; stronger institutional cover secured the legitimacy of their position, but it did not necessarily indicate improved integrity. Because of this episode, many neurologists sensed that the specialty required greater political control. Various international meetings in the interwar period had underscored how much neurology across the globe was changing and in need of reform. As Chapter 6 outlines, interwar British neurologists, feeling frustrated with the political inadequacies of the generalist Section of Neurology, used the prestige of international meetings as a pretext for criticising the Section's function. Dissatisfied with the absence of a national venue for neurologists across Britain and threatened by the seemingly unchecked expansion of the Section of Neurology (then over three hundred members), a small group of neurologists split from the Section and formed the Association of British Neurologists.

This new Association, the subject of Chapter 7, though initially politically apathetic, began to take some steps towards redressing neurology's institutional inadequacies. It advocated the formation of a Committee on Neurology at the Royal College of Physicians and lobbied the Ministry of Health to appoint an Advisor in Neurology, which occurred finally in 1958. When not engaged in political matters, the Association of British Neurologists held scientific meetings yearly, bringing together various figures working in the neurological sciences across the country. It remained an eclectic membership; pathologists, physiologists, psychiatrists, general physicians with an interest in neurology, and neurologists comprised its core, but few of its original members actually held positions as neurologists within their local contexts.

Nevertheless, the Association of British Neurologists marked a point of transformation. Whereas before the practices of neurology had always been broad and all-encompassing, this Association selected new members with great care and restricted them to a specific type of clinical practice. Likewise, where before political engagement in neurology had not been considered proper conduct, in contrast, the new Association protected the specialty and took steps to defend its interests in negotiations with the Government or medical profession.

Curiously, some neurologists perceived a crisis in the field in the years between 1950 and 1960. Leaders aired concerns that the numbers of neurologists were shrinking, and that few new graduates were entering the field. They thought funding for research was drying up, and many of the field's most talented and renowned practitioners were retiring. The Chapter 8, the Conclusion, considers this crisis in the general context of neurology's practices. The peculiar and idiomatic logics of neurology's practice located its discoveries and treatments in an imagined past. This nostalgic frame of reference was predicated upon a past reality that had never existed in the way many neurologists imagined when they considered the status of their field in the 1950s. The irony of neurology's crisis in the 1950s and early 1960s was that it had finally entered a period, where its practitioners had defined the subject. The definitions, however, were institutional, political, and practical. Neurological practices had always disdained such simplistic and overly-rational definitions. Now that they had defined its practices, a previous autonomy that had been available to these physicians to create and determine

their practices diminished. Whereas before neurologists claimed as their own any interesting discovery of the nervous system made in adjacent fields, now it was necessary for them to show their calibre without the help of their various 'deputies'. In relinquishing ambiguity for functional stability, neurology had entered into a new relationship with the British state, and many of the glories of its former practices disappeared. In effect, the defining of neurology was therefore the formulation of a juridical space of limitations in practice.

CHAPTER 2

British Medicine and Neurology: Practices in Context

‘A grey area.’¹

Introduction

This chapter establishes contexts of British neurology in order to frame the argument of future chapters, which analyse the emergence and practices of the specialty between 1880 and 1960. Here I adopt a naive view of neurology, and begin with the assumption that there was nothing necessarily ‘neurological’ or ‘neuroscientific’ about past contributions to scientific knowledge, institutions, or figures.² Though it is now clear that the rise of neurology began in the late-nineteenth century, *and* that the clinical specialty was established in institutions by the middle of the twentieth, this chapter emphasises that specialist practice in late nineteenth-century Britain was embedded within a medical culture more philosophically *generalist* in its values than is commonly recognised.³ My

¹ In popular idiom ‘a grey area’ refers to a part of a subject where it is difficult to distinguish between one category and another.

² There are now two competing views of how the emergence of neurology can be understood. The first view, and by far the more popular one, is that characterised by the approach found in: Jacyna and Clark, *The Nineteenth-Century Origins of Neuroscientific Concepts*. Jacyna and Clarke located the origins of neuroscientific concepts in research studies carried out by physiologists, histologists, pathologists, and anatomists in the early-to-mid nineteenth century. Jacyna and Clarke were subsequently criticised by Kevles and Geison in, “The Experimental Life Sciences in the Twentieth Century” *Osiris*, pp. 101-107. Kevles and Geison argued that Jacyna and Clarke’s approach created a peculiar paradox: they asked why should such research be distinguished as neuroscientific? They advocated an alternative approach that focused on the institutions of neuroscience and neurology, and hypothesised that this view would place the emergence of neurology and neuroscience squarely in the twentieth century.

³ On the rise of neurology in the twentieth century, see the perspectives of: William Bynum, “The nervous patient in 18th and 19th century Britain: the psychiatric origins of British neurology” in *The Anatomy of Madness: Essays in the History of Psychiatry* (London; New York: Tavistock Publications, 1985); Peter

goal is to show how a seemingly inevitable process, specialization, was one actually fraught with ambiguity and contingency.⁴ Furthermore, by placing emphasis on neurologic practices, and specifically what produced and then reproduced them and why, I hope to demonstrate that medical practices always preceded the assimilation of scientific knowledge into neurology. This means that clinical neurology's 'stunning developments in the twentieth century' should not be understood as coming about due to the production of scientific knowledge, but because 'medicine' appropriated that knowledge into its practices.⁵

I begin by exploring the British medical context and analysing the rise of medical specialists in generalist medical culture in the nineteenth century. Thereafter I examine the specific contexts and vicissitudes of British neurological practices, followed by a discussion of the diversity of nineteenth and early twentieth-century scientific approaches and methods for investigating the nervous system. Such diversity in practices, approaches, and methodologies derived foremost from a view of illnesses as distributed across a unified body. This discourse of unity was one driven by generalist medical

Koehler, "The evolution of British neurology in comparison with other countries", in F. Clifford Rose (ed.) *A Short History of Neurology The British Contribution 1660-1910* (Oxford: Butterworth and Heinemann, 1999), pp. 58-74; Douglas Lanska, "The role of technology in neurologic specialisation in America" *Neurology*, Vol. 48 No. 6 (1997), 1722- 1727; For the imbedded nature of neurology, see Rosemary Stevens, *Medical Practice in Modern England: The Impact of Specialisation and State Medicine* (New Haven and London; Yale University Press: 1966), pp. 39-41.

⁴ On the problem of inevitability in analysis of the rise of medical specialties, see George Weisz's recent discussion in, *Divide and Conquer: A comparative history of medical specialisation*. (Oxford: Oxford University Press, 2006), pp. xiv-xviii. Weisz does not explicitly reject inevitability.

⁵ Roy Porter, *The Greatest Benefit to Mankind: A Medical History of Humanity from Antiquity to the Present* (HarperCollins, 1997), pp. 534-551, quote on p. 549.

values, and was therefore one that sought to locate neurological knowledge within a general picture of medicine, a pattern appearing in the discourses in manuals and textbooks of nervous diseases as well. These sources present a picture of neurology as a diverse, all-encompassing medical practice and knowledge. Manuals and textbooks pedagogically represented neurological practices as requiring an expansive practitioner perspective, a broad, diligent and demanding training in general medicine, and care and rigour in the physical examination of the patient. Cultural and social norms in British medicine insisted that practitioners interested in nervous diseases be prepared to work competently in all areas of general medicine; such sanctions were further enforced by institutional realities, since most hospitals did not have departments for nervous diseases before 1920.

Similarly, journals and professional societies emulated this pattern throughout the late nineteenth and early twentieth century. Though these institutions further legitimised the authority and status of the practices of nerve specialists, participation in these institutions nonetheless, compelled them to adopt the broadest definitions of neurology and its adjacent disciplines.⁶ Believing neurology was advanced practice in general medicine, these practitioners organised neurological institutions around a view of themselves as physicians of wide interests and learning in many subjects. As I have already pointed out, these practitioners were to be savants ‘in the right sense of the word’.⁷ Yet, how were the

⁶ This is preliminary discussion only. I will be focusing in Chapter 3 on the Neurological Society of the United Kingdom, and in Chapter 4, on the Section of Neurology of the Royal Society of Medicine. Chapter 7 will analyse the Association of British Neurologists.

⁷ “The Realm of Neurology” *JNP* Vol. 1 No. 1, (1920), p. 68.

identities of these savants constructed in retrospect? I answer this question through an analysis of the constructions of identity of these physicians in their obituaries. An analysis that recognises (as in proceeding sections) an expansive range of interests and occupational identities, only some of which suggest interests in the neurology.

Finally, this chapter closes by examining the emergence of neurology in special and general hospitals. As already hinted, neurology's institutionalisation was both haphazard and limited in the period before 1950, a sign of broader political appreciations and dispositions affecting this community internally and externally. A *Lancet* article in 1955, for example, noted that of 9,708 known specialists and consultants in Britain, only 73 were neurologists.⁸ In the early 1940s, neurologists had still not received the full legitimacy of official recognition; nor, had they found much support for political autonomy within medicine more generally.⁹ While the reasons for this limited recognition are complex, the neurologists' continued efforts to associate the discipline with general medicine and thus keep its practice expansive, ultimately explain why this happened.

⁸ "Consultant and Other Specialist Staff in Hospitals" *The Lancet* (1955), p. 448.

⁹ The dependency of professions upon the endorsement and protection of their practices by the state is a phenomenon that is regularly observed and recorded in both the sociology of the professions and in historical accounts of them. See the illuminating remarks of Jan Goldstein, *Console and Classify: the French Psychiatric Profession in the Nineteenth Century* 2nd ed. (Chicago and London: University of Chicago Press, 2001), pp. 8-40, especially, p. 37; also her remarks on the similar dependence of specialists, pp. 55-63.

I interpret practices broadly throughout this dissertation.¹⁰ In this chapter (and throughout), practices are understood as being more than patient-physician interactions and relations, or acts of scientific ‘making and (unmaking)’.¹¹ Practices in medicine represent idiomatic social modes of production and operation that create and protect structures mediating *both* patient-physician relations *and* the production and interpretation of new medical knowledge. These operational modes simultaneously legitimate and authenticate the habits of physicians, intra-professionally and extra-professionally. Practices are temporal, and therefore reproduced in subsequent generations of practitioners. Practices are not consciously organised; nor are they naive. They protect and pass-on strategies that achieve goals and interests, and simultaneously justify the physician’s experiences of reality.¹² Practices in medicine materialise most

¹⁰ I would emphasise that practice belongs within the domains of idioms of action: ‘What works in theory may not work in practice’ is an irreversible idiom; ‘what works in practice may not work in theory’ does not make sense. Simply put, making theories is a practice.

¹¹ Andrew Pickering, “From Science as Knowledge to Science as Practice” in Andrew Pickering ed. *Science as Practice and Culture* (Chicago and London: University of Chicago Press, 1992), pp. 2-3 ft, 1; also see pp. 15-17. Pickering distinguishes between practice and culture, and appeals to the temporality of practice. He makes the fundamental observation that the practice’s products are used by practice again. However, I extend Pickering’s views, by adding that practices of medicine exist in spaces of apparent inaction as well, including everyday life. Furthermore, I am insisting that individuals have little to no agency at all; see de Certeau, *The Practice of Everyday Life*, pp. 91-176.

¹² Bourdieu, *The Logic of Practice*, pp. 52-121. Bourdieu writes of practice that ‘in practice, only one sector of a system of schemes mobilised in different situations is mobilised at a time (though without ever entirely breaking all the connections with the other oppositions), and since the different schemes mobilised in different situations are partly autonomous and partly linked to all the others, it is quite natural that all the products of the application of these schemes – a particular rite or a whole series of ritual actions, such as the rites of passage – should be partly congruent and *should strike anyone who possesses practical mastery of the system of schemes as roughly, practically, equivalent.*’, p. 269; Bourdieu further explicates a methodology for studying practice in *Homo Academicus*, especially pp. 194-195.

clearly in disjunctions – i.e. in the visible differences *between* saying and doing.¹³ What is not said is what is done.¹⁴

Practicing Medicine in Nineteenth Century Britain

Contextualising neurologic practices within British medicine and the rise of its medical specialists, requires recognising that medicine changed dramatically in Europe in the early nineteenth century. Underpinning medicine's changes, as Michael Foucault has described, was a new intellectual configuration of disease that no longer viewed illness in its classical formulation as expressions of visible symptoms.¹⁵ Instead, if paradoxically, medicine's revolution occurred through physicians' recognition that it was possible to perceive life in death. Paris mortuaries revealed that a new understanding of illness was possible through the examination of patho-physiological states.¹⁶ Classical medicine was thus subsumed into a 'medicine of pathological reactions, a structure of experience that dominated the nineteenth century and twentieth...since the medicine of pathogenic agents

¹³ On the rules of saying and doing, see the illuminating passages in Peter Winch, *The Idea of a Social Science and its Relation to Philosophy* (London and New York: Humanities Press, 1976), pp. 33-39. In particular: 'A single use of language does not stand alone; it is intelligible only within the general context in which language is used; and an important part of that context is the procedure of correcting mistakes when they occur and checking when a mistake is suspected', p. 39. See also Pierre Bourdieu, *Science of Science and Reflexivity*, pp. 100-114.

¹⁴ Ludwig Wittgenstein, *Tractatus Logico-Philosophicus* (London and New York: Routledge, 2003), p. 89; Jean-François Lyotard presents the social ramifications of these rules in the final passages of, *The Differend: phrases in dispute. Theory and History of Literature* Vol. 46 (1988), pp. 3-189, see specifically, pp. 151-183; Pierre Bourdieu claimed these silent spaces should be examined scientifically, *Science of Science and Reflexivity*, pp. 37-44.

¹⁵ Michael Foucault, *The Birth of the Clinic* (London: Routledge, 2000), pp. 5-9, 11, 16.

¹⁶ *Ibid.*, pp. 153-154, 'Nineteenth-century medicine was haunted by that absolute eye that cadaverises life and rediscovered in the corpse the frail, broken nervure of life.', p. 166.

was to be contained within' this formulation.¹⁷ As part of this transformation, medicine became concerned with the 'philosophical status of man'; ironically, it became a purveyor of state force and social coercion as well.¹⁸

The beginnings of this transformation occurred in Paris.¹⁹ George Weisz has noted that after the French revolution destroyed the *ancien regime's* conservative institutions of academic power, new general hospitals and universities emerged and were run by a political and social ethos determined to 'distinguish and separate' the natural world. It was this tendency, he argues, that was responsible for the first appearance of modern medical specialties.²⁰ Under the new regime, medicine and surgery became unified subjects, and an ethos of rationalism subsequently divided medicine into occupational categories similar to divisions of labour. Whereas classical medicine had studied symptoms and anatomy before, now fields of inquiry such as 'histology', pathological-anatomy, and (slightly later) experimental physiology justified the formation of new divisions of labour in medicine. Partly these divisions were stimulated by a growing appreciation of the utility of technologies like the stethoscope and microscope for

¹⁷ Ibid., p. 191.

¹⁸ Ibid., p. 198; also see Foucault's remarks on supervision and 'brothels' for an interesting discussion of medicine and State power. Michael Foucault, *Discipline and Punishment: the Birth of the Prison* (Penguin Books, 1991), fn. 15, p. 322; also see his remarks on the prison as remedy, pp. 267-268, and the prison as a medico-psychological institution, p. 270. Goldstein, *Console and Classify*, pp. 197-240.

¹⁹ Richard Shyrock, *The Development of Modern Medicine* (New York: Knopf, 1947), p. 249; also see Erwin Acherknecht, *Medicine in the Paris Hospital, 1794-1848* (Baltimore: Johns Hopkins Press, 1967); Paul Starr, *The Social Transformation of American Medicine: the rise of a sovereign profession and the making of a vast industry* (HarperCollins Press, 1982), pp. 54-56.

²⁰ Weisz, *Divide and Conquer*, quote on p. 18; see pp. 3-25; for a general discussion; Stevens, *Medical Practice*, p. 26.

medicine, but the main impetus for specialization, as Weisz has argued, was stimulated by the appearance of the Republic's centralised bureaucracies, which sought to stimulate and regulate the production of scientific knowledge, as well as organise and categorise the world.²¹

Circumstances in medicine, however, were markedly different in Georgian and Victorian Britain from those in contemporary France.²² At the turn of the nineteenth century, Britain was a flourishing, eclectic world of healers. Whereas, earlier scholars divided the British medical profession between four groups: physicians, surgeons, apothecaries, and surgeon-apothecaries, it is now clear that there were many medical practitioners beyond these limited categories.²³ These included a motley crowd of specialists, homeopaths, and traders of rare (sometimes mystical) medical commodities gathered from the bazaars of Britain's colonial empire.²⁴

In England, the most prominent medical institutions were: the Royal College of Physicians, the Royal College of Surgeons, and the Worshipful Society of Apothecaries. Being the oldest of the medical institutions and having secured greater medico-legal

²¹ Weisz, *Divide and Conquer*, pp. 3-25, p. 11; also, Goldstein, *Console and Classify*, pp. 47-60; pp. 149-151.

²² Anne Digby, *Making a medical living: Doctors and patients in the English market for medicine, 1720-1911* (Cambridge: Cambridge University Press, 1994), pp. 11-68.

²³ S.W.F. Holloway, "Medical Education in England, 1830-1858" *History* Vol. 49 (1964), p. 299.

²⁴ Irvine Loudon, *Medical Care and the General Practitioner, 1750-1850*. (Oxford: Clarendon Press, 1986); Anne Digby, *The Evolution of British General Practice, 1850-1948*. (New York: Oxford University Press; 1999); Pratik Chakrabarti, "'Neither of meate nor drinke, but what the Doctor alloweth': Medicine amidst War and Commerce in Eighteenth Century Madras" *BHM* Vol. 80 No. 1 (2006), pp. 1-38; Karen Buckle, "The Culture of Oculists in England, 1660-1740" MA Diss. University of York, 2005.

prerogatives over its competitors, the license of the Royal College of Physicians carried the greatest prestige. A physician licensed through the Royal College of Physicians could give medicines and practice surgery legally, while licentiates of the College of Surgeons could conduct surgery, and those recognised by the Society of Apothecaries could dispense medicines alone.²⁵ Nevertheless, the influence of these medical institutions may only have been modest in the early nineteenth century. The surgeon-apothecary functioned, for example, more as a general practitioner than an account of official medical institutions and organisations might suggest.

For the period 1830 to 1858, it has been noted that British medical education was becoming increasingly rationalised by the profession and the State.²⁶ One culmination of this process – a landmark reform in medical education – and for the structure of the medical profession generally, was The Medical Act of 1858.²⁷ By the time the 1858 Act had passed into law, the landscapes of British society had changed substantially from those seen at the turn of the century, from its feudal-agrarian society into one of science, innovation and industry.²⁸ Part and parcel of these phenomena was an increase in the middle class population, which in turn expanded the paying consumer-base for medical practitioners. It is often un-remarked that the new legislation protected those customers

²⁵ Stevens, *Medical Practice*, pp. 11-25.

²⁶ Holloway, “Medical Education in England, 1830-1858”, p. 299.

²⁷ Other earlier acts such as The Apothecaries Act of 1815 and The Anatomy Act of 1832 were clearly important as well, but The Medical Act reformed the entire practice of medicine. J.R. Ellis, “The Growth of Science and the Reform of the Curriculum” in *The Evolution of Medical Education in Britain* (London: Pitman Medical Publishing, 1966), p. 156.

²⁸ A.J. Youngson, *The Scientific Revolution in Victorian Medicine* (London: Croom Helm, 1979), p. 10.

by standardising the training of medical practitioners and regulating the profession's membership. Nevertheless, the moves towards regulating entrance into the practice and accreditation of the profession was a reformist agenda of general practitioners seeking to curtail the licensing monopoly of the Royal Colleges.²⁹

To understand the effect this had on specialization, it is first necessary to consider the movement for reform that occurred within medicine in this period. This movement both stimulated and restrained the rise of medical specialists, and harkened the creation of the modern medical profession in which those specialists would be mobilised in the future.³⁰ In many ways, the 1858 Act defined the practice of medicine to come, and it did so mainly through legislating medical education and changing licensing requirements.

In terms of medical education in the early nineteenth century, this was disparate and eclectic, although when it occurred within places of formal education, these tended to be Scottish rather than English universities.³¹ Between 1800 and 1850, for example, the sociologist Robb-Smith noted that there were 273 graduates in medicine from Oxford and Cambridge, whereas almost 8,000 practitioners held medical degrees from Scottish

²⁹ F.N.L. Poytner, "The Influence of Government Legislation on Medical Practice in Britain" in *The Evolution of Medical Practice in Britain* (London: Pitman Medical Publishing, 1961), p. 12.

³⁰ William Hale-White, *Great Doctors of the Nineteenth Century* (London: Edward Arnold, 1935), see specifically the accounts of William Bowman, pp. 177-188; William Gull, pp. 208-226; Samuel Wilks, pp. 227-245; also see Bryan Donkin, *The Samuel Wilks Fifteen Club: a record from its foundation in February 1885 to May 27, 1926* (London: Bryan Donkin, 1926).

³¹ Indeed Scottish Universities were viewed in the early nineteenth century as proverbial 'medical Meccas'. Constance Putnam, *The Science We Have Loved and Taught: Dartmouth Medical School's First Two Centuries* (London and Hanover: University Press of New England, 2004), pp. 10-14, p. 14.

universities. This popularity of Scottish medical education, however, was one not reflected equally in the demographics of the faculties of London's voluntary teaching hospitals, where approximately '55 percent were graduates of Oxford and Cambridge'.³²

Medical education, when it occurred in the London teaching hospitals and unlike that in the universities, was distinguished by a practical curriculum: subjects like botany and chemistry were deemed important for their pharmaceutical and therapeutic applications, while human and comparative anatomy were considered important for surgery.³³ Independent courses in physiology were rare, and an anatomical perspective grounded the little physiology taught. According to Gerald Geison, after the 1870s, physiology acquired an autonomous status within British academia and medicine, with ramifications for the practices of those pathological or physiologically dependent specialties.³⁴ Briefly, by contrast with the physicians, surgeons and apothecaries received most of their training in apprenticeships – although by the middle of the nineteenth century they were regularly seeking training in London's teaching hospitals as well.³⁵

Two results of the 1858 Act were the creation of the Medical Directory and the General Medical Council. The Medical Directory contained the names of all practitioners with the

³² A.H.T. Robb-Smith, "Medical Education at Oxford and Cambridge Prior to 1850" in ed. F. N. L. Poynter *The Evolution of Medical Education in Britain* (London: Pitman Medical Publishing, 1966), data on p. 59, quote on pp. 51-52.

³³ Ellis, "The Growth of Science and the Reform of the Curriculum", pp. 155-168.

³⁴ Gerald Geison, *Michael Foster and the Cambridge School of Physiology: the scientific enterprise in late Victorian Society* (Princeton: Princeton University Press, 1978), pp. 23-31 quote on p. 31.

³⁵ R.M.S. McConaghey, "The History of Rural Medical Practice" *The Evolution of Medical Practice in Britain*, pp. 117-141, p. 140; Stevens, *Medical Practice*, pp. 16-21.

legal right to practice medicine in Britain. Although, following the pattern of resistance to specialization that so marked Britain's medical scene throughout the nineteenth century, the registry of practitioners did not acknowledge specific specialties. The General Medical Council standardised the primary educational background and licensing of all medical practitioners in the country, consequently reducing the authority of the Royal Colleges by making medical degrees from universities, provincial medical schools, and the Colleges and Society of Apothecaries equal.³⁶ The introduction in 1861 of the College of Physician's higher diploma, the MRCP, was one response to this diminished authority, and it effectively reinforced British medicine's two classes: the consultants and general practitioners. The former held the Colleges' higher degrees, eventually becoming Fellows (FRCP or FRCS), while the latter possessed the LRCP or an equivalent diploma. If the Medical Act reformed British medicine, the result was not one of diminished complexity for identifying the proper route into the profession.³⁷ Furthermore, as Rosemary Stevens wrote, 'instead of simplifying the structure of the medical profession, the 1858 Act consolidated its complexities' by allowing various medical institutions arbitrary license over their own standards.³⁸

As I have already noted, physicians resisted medical specialization throughout this period. Would-be specialists lived and worked in a medical culture generally opposed to specialization. Resistance to it occurred for several reasons: hospitals throughout Britain were in a perpetual state of fiscal crisis, and their chief sources of income were

³⁶ Weisz, *Divide and Conquer*, pp. 29-34.

³⁷ "Educational Number: Medicine as a Career" *BMJ* (1899), pp. 513-540.

³⁸ Stevens, *Medical Practice*, p. 25.

benefactions and subscriptions.³⁹ Altering the arrangements of hospital wards by creating specialist departments was a costly proposal, if only because it meant increasing the size of the resident staff. For instance, the large wards Florence Nightingale (1820-1910) had called for throughout her career offered fiscal as well as hygienic advantages, since one night nurse could provide adequate care for a large ward but not for several specialised wards.⁴⁰ Increases in staff, and therefore costs, were an obvious and predictable result of medical specialization, but there were other concerns as well. Hospital administration and physicians alike worried that increasing the specialised training for medical students would complicate teaching. Experience of the general wards, it was felt, should mirror the disorder that students would encounter in practice.⁴¹

Medical consultants also greeted specialization with scepticism throughout most of the nineteenth century.⁴² As Steve Sturdy and Roger Cooter have noted, this appears rather strange to us now, given that Consultants were also most likely to be working in the specialist hospital environment.⁴³ Indeed Rosemary Stevens observed, for example, that of 195 physicians working in London general hospitals in 1899, only 31 did not hold

³⁹ Brian Abel-Smith, *The Hospitals, 1800-1948: A study in social administration in England and Wales* (London: Heinemann, 1964).

⁴⁰ Florence Nightingale, *Notes on Nursing* (New York: Dover Publications, 1969), pp. 37-44.

⁴¹ Charles Newman, "The Rise of Specialism and Postgraduate Education" in *The Evolution of Medical Education in Britain* (London: Pitman Medical Publishing, 1966), pp. 169-191, 173-175.

⁴² *Ibid.*, p. 174; also see Francis Fraser, "The Rise of Specialism and the Special Hospitals" in (ed.) F. N. L. Poynter, *The Evolution of Hospitals in Britain* (London: Pitman Medical Publishing, 1964), pp. 179-180.

⁴³ Steve Sturdy and Roger Cooter, "Science, Scientific Management, and the Transformation of Medicine in Britain, c. 1870-1950," *History of Science* Vol. 36 (1998), p. 424.

positions in specialist hospitals as well.⁴⁴ Given this, the question remains as to why physicians were so reluctant to endorse specialization – one that remains unanswered in histories of the period.

In my view, however, the best explanation can be found in a predominant medical ethos that perceived in specialization a latent, perhaps democratic, mediocrity. Consultant physicians, and perhaps even general practitioners, perceived the body as a united subject: the colour of the skin, the taste of urine, or a twitching of the eyes, for example, were clues for deciphering an underlying but ubiquitous condition.⁴⁵ In 1840, Thomas Laycock (1812-1876), a physician later regarded as having interests in nervous diseases, contemplated how conditions of the kidneys could sometimes induce ‘cerebral disease, as coma, convulsions, and apoplexy.’ This led him to remark that, although he was not anxious that ‘we should become exclusively “water-doctors”...it could not but be beneficial to practice, if practitioners were to examine the morbid changes of the urine.’⁴⁶ Pathological examinations, like those advocated by Laycock, demonstrated that disease worked across the whole body. Johns Hughlings Jackson (1835-1911), Physician to the National Hospital for Epilepsy and Paralysis, argued similarly that:

If anyone were to work on different sections of medical practice, so as merely to add isolated series of facts to one another, he would really make little progress in cultivating

⁴⁴ Stevens, *Medical Practice*, p. 28.

⁴⁵ Digby, *Making a medical living*, p. 34.

⁴⁶ Thomas Laycock, “On the Prevalence of Nervous Diseases – arrest of the Urine” *The Lancet* (1840), p. 608.

his own mind. Such a man would dwell with exaggeration – hurtful to his own organisation of medical knowledge – on amaurosis as a defect of sight, and too little on it as a defect of specialised part of universal sensation.⁴⁷

The finest medical discoveries of the nineteenth century were those that worked upon the whole body: Jackson's veritable 'universal'. The intrinsic worth of antiseptic techniques, for instance, was their general applicability for consultants and general practitioners alike. Hale-White, for example, retrospectively deemed Joseph Lister's (1827-1912) prevention of suppuration remarkable exactly because it worked within a united body and was a general principle.⁴⁸ Specialised knowledge, in contrast, appeared irreconcilably narrow; an idiom of medical practice thus emphasised breadth of experience.

Nevertheless, opposition to specialization did not prevent it from occurring, and specialists became early fixtures in British medicine; special hospitals and specialist private practices were established early in the nineteenth century. The founding of Moorfields Eye Hospital in 1804 is an early example, and Stevens observed that by 1900, there were 128 specialist hospitals in England and Wales. Those in London were 'centres of specialist teaching and research'.⁴⁹ Her claim exaggerates the situation, overlooking

⁴⁷ Quoted in James Taylor, "The Ophthalmological Observations of Hughlings Jackson and their bearing on Nervous and other Diseases" Vol. 38 *Brain* (1915), p. 395.

⁴⁸ William Hale-White, *Great Doctors*, pp. 246-267, 258; Admittedly, Lister's ideas were not readily accepted by the medical profession. On the controversy, see Youngston, *The Scientific Revolution*, pp. 157-211.

⁴⁹ Stevens, *Medical Practice*, p. 27.

the mobility of those physicians working in special hospitals.⁵⁰ Junior appointments in all hospitals were a means of remaining employed within the medical hierarchy until elected to the status of Assistant or Full Physician within a larger hospital.⁵¹ Terms of appointment in any hospital could be short, and physicians often held many different appointments, sometimes simultaneously, in different specialist and general hospitals throughout their careers. This could sometimes present a dilemma to individual physicians or surgeons; for example, when the National Hospital for Epilepsy and Paralysis hired its first Surgeon, a Mr. Russell, they insisted that he resign from his appointments and obligations at other hospitals. This in fact he chose not to do, leading to his dismissal, at which point John Hughlings Jackson was hired as Assistant Physician.⁵² Because rising to the status of Full Physician aided the growth of a private practice, individuals' circumstances and their participation in specialist practice was consequently often more happenstance than purposefully planned. To write, therefore, of specialist practices and practitioners in nineteenth century requires attention to their interactions with British medical culture.

Nerve Practice in Perspective

As nerve specialists in the nineteenth and early twentieth century had imbricate occupational identities that suited their generalist culture, they are far more difficult to

⁵⁰ Francis Fraser, "The Rise of Specialism and the Special Hospitals" pp. 169-185.

⁵¹ Stevens, *Medical Practice*, p. 33.

⁵² WL, GC/83/13 Minute books QS1.859/6G, 30-04-1862.

categorise historically than is commonly admitted.⁵³ These nerve specialists attended to a range of patients, many not suffering from nervous diseases.⁵⁴ Befitting this eclecticism, physicians held various institutional positions, and in their published research reports on the nervous system and nervous diseases (and their research was not restricted to those subjects only) they identified themselves variously as: physician or surgeon in a general hospital, pathologist, psychiatrist, psychologist, or alienist – the most rare identifier was neurologist. Though the most elite among them held professorships in clinical medicine, academically their positions were diverse and included: lectureships in nervous and mental diseases, electricity, neurology, pathology, and anatomy.⁵⁵

Moreover, diseases of the nervous system were no less various than the occupational descriptions of nerve specialists. The seemingly arbitrary classification of nervous diseases, for example, engendered general contumacy between factions of nerve specialists throughout the nineteenth and early twentieth century. Because nerve illnesses functioned in both psychical and physical realms, there were competing views of aetiology, paralleling the intangible Cartesian worlds of mind and body.⁵⁶ These intangible worlds were ‘largely determined by prevailing cultural preferences for the

⁵³ Some comments on this oversight appear in: Mervyn Eadie, *The Flowering of a Waratah*, pp. 41-51; Also see, Howard I Kushner, *A Cursing Brain*, p. 235, ft 21.

⁵⁴ See, for example: Samuel Wilks, *A Memoir: on the new discoveries or new observations made during the time he was a teacher at Guy's Hospital* (London: Adlard and Son, 1911); Humphrey Rolleston, *Life of Sir Clifford Allbutt*, (London: Macmillan and Co. Ltd, 1929); M. E. Broadbent ed. *The Life of Sir William Broadbent*, (London: John Murray, 1909), pp. 228-233.

⁵⁵ See the comments in the correspondence between [Private Collection], Harvey Cushing and Bramwell, 1 September 1934; Bramwell to Cushing, 14 September 1934.

⁵⁶ Bryan Turner, *The Body and Society* (Basil Blackwell, 1984), pp. 192-202.

resolution of the mind-body complex' and invested thus with 'theological and moral restrictions' even as they purported to be paradigms of scientific investigation and experimentation.⁵⁷

A classificatory scheme dividing nerve practice between mental and physical aspects did emerge eventually, but rather than restricting practice, the scheme adopted the broadest view possible. Nerve illnesses were lumped into one of two categories: functional or organic. While functional meant diseases of unknown origin, organic disease suggested a knowable lesion in the body caused the condition. Yet, in practice, both categories were contingent and socially constructed.⁵⁸ One author commented in 1892, that 'most writers...regard [functional] as only provisional on the assumption that some kind of structural change in nervous matter must underlie every definite nervous disorder and that such change in time will be found'.⁵⁹ Ten years later, little had changed. 'The classification of nervous diseases is a matter of considerable difficulty, because the aetiology of many of them is but little known, while the pathological changes during the prodromal and early stages are still less known'.⁶⁰ Even in 1926, Charles Symonds, an Assistant Physician in Nervous Diseases at Guy's Hospital, notes in his wryly-titled essay 'Functional or Organic?' that patients with functional disorders remained uncharted territory. Their 'ills provide many unsolved problems of pathology and causation, while

⁵⁷ Edward Stainbrook, "Psychosomatic Medicine in the Nineteenth Century" in ed. John Sutherland, *Evolution of Psychosomatic Concepts, Anorexia Nervosa: a paradigm* (London: The Hogarth Press, 1965), p. 7.

⁵⁸ See, for example, Oppenheim, *Shattered Nerves*.

⁵⁹ "Functional Nervous Diseases" *The Lancet* (1892), p. 436.

⁶⁰ "The Classification of Nervous Diseases" *The Lancet* (1902), p. 182.

the nature and persistence of their complaints invite, if they do not sometimes exhaust, our sympathy'.⁶¹ The persistence of this classificatory ambiguity, as well as the lack of etiological bedrocks, prompted the diversity of strategies nerve specialists used to maintain their practices. Moreover, such broadness and ambiguity was economically, socially, and perhaps even politically advantageous.⁶² Furthermore, patients often desired the social prestige of treatment by a specialist.⁶³ The less restricted medical practice was for these practitioners, the more room they had for increasing their professional and personal capital – symbolic, cultural, and financial.

In their quests to organise functional and organic nervous diseases, nerve specialists became superb at reproducing the ambiguities of their practices. Given various names now, the schools of thought that developed out of their indistinctiveness is captured by the amorphous range of terms: alienism, structural psychology, neurology, psychiatry, Freudian and Jungian analysis, neuropsychiatry, hysteria, neurasthenia, and inhibition. Such ambiguity was the height of generalist practice, for as one American psychiatrist remarked to William Osler (1849-1919), Regius Professor of Medicine at Oxford, 'there must be a liberal willingness to let fields overlap and to have them in common, with frequent consultations and collaboration. Neurasthenia and hysteria and aphasia and apraxia are essential chapters in internal medicine, in neurology and in psychopathology

⁶¹ Charles Symonds, "Functional or Organic" *The Lancet* (1926), p. 64.

⁶² Nikolas Rose, *The Psychological Complex: Psychology, Politics, and Society in England 1869-1939* (London: Routledge & Kegan Paul, 1985), pp. 39-61.

⁶³ Rosen, *The Specialization of Medicine*, p. 69.

alike.’⁶⁴ If physicians did not purposively *induce* this ambiguity in their practice, they nevertheless purposively *maintained* it in their practice. Moreover, embedded as they were in the generalist cultures of Victorian and Edwardian Britain, their strategy replicated the appreciations and dispositions that had produced them.

Such ephemeral or ‘liberal’ nerve practices also denoted wider worldviews; ones not restricted to mean specialist interests but rather involved in ultimate questions.⁶⁵ Indeed these physicians felt this the appropriate view, for the study of man’s nervous system was ultimately a study of humanness, an area of inquiry belonging to the realm of philosophy and theology. This was a view that inspired many and was held by more than a few.⁶⁶ Frederick Mott (1853-1926), renowned as the founder of the Maudsley Hospital’s pathological laboratories, in 1900 retrospectively contemplated the ‘new neurology’ of the nineteenth century, and noted that the mysteriousness of the brain’s functions had resonated even with Shakespeare, ‘whose psychology will last for all time because it is the breath of humanity in all its varied aspects’.⁶⁷ That humanity, in the estimations of

⁶⁴ Adolf Meyer to William Osler, 7 April 1913, I/2963/3 Osler, Sir William, The Adolf Meyer Collection Alan Mason Chesney Medical Archives of Johns Hopkins Medical Institutions, Baltimore (Hereafter, AMCMA).

⁶⁵ Michael Foucault, *The Birth of the Clinic*, p. 198.

⁶⁶ Walther Riese noted this paradox when he wrote wisely that, ‘the history of ideas in neurology is not the history of neurology. Nor is an outline a complete record of all ideas ever presented by neurologists.’ “An Outline of a History of Ideas in Neurology” *BHM* Vol. 23, No. 2 (1949), p. 111, ft. 1.

⁶⁷ Frederick Mott, “The Selective Influence of Poisons in Relation to Diseases of the Nervous System” *The Lancet* (1901), p. 230.

many in the first decades of the twentieth century, was rife with the turmoil, stress, and anxieties marking the Modern Age.⁶⁸

By the 1920s, neurology had become a philosophical program for social reform.⁶⁹ Neurological knowledge, argued one American neurologist in a widely circulated lecture, should cure the ‘rampant idealism of the times’ by championing ‘realities’ that ‘shattered nerves and unbalanced minds’ could not comprehend. ‘If we are realists, we are not materialists. We do not sympathise with the onslaught on higher education, with the apotheosis of the mob, with the repressed emotions of the Freudians, or with the expressed emotions of the parlour bolshevists’.⁷⁰ This philosophical program was possible because of the expansiveness of neurological practices. In the words of one author, ‘neurology signifies the science of the nervous system, and by tacit consent the neurologist is he who handles nervous disease in any-and-all of its manifestations’; maintaining that definition meant maintaining social prestige and generalist status, and that meant keeping generalist credentials as well.⁷¹

Since neurology was defined as an all-encompassing clinical and scientific subject, no one person during the nineteenth or twentieth century could lay claim to it entirely, and

⁶⁸ William Ireland, “The Increase of Diseases of the Nervous System and of Insanity” *The Lancet* (1907), pp. 892-895; Frederick Mott, “The Hereditary Aspects of Nervous and Mental Diseases” *The Lancet* (1910), pp. 1057-1064.

⁶⁹ Edward Farquhar Buzzard, “Reports of Societies: The Evolution of Neurology and Its Bearing on Medical Education,” *BMJ* (1924), p. 718.

⁷⁰ James Hendrie Lloyd, “The Neuroses of Peace” *The Archives of Neurology and Psychiatry* Vol. 4, No. 1 (1920), p. 7.

⁷¹ “The Realm of Neurology” *JNP* Vol. 1 No. 1, (1920), p. 68.

moreover the best even ‘Masters’ of the subject could do was integrate aspects of its knowledge into general frameworks. Thus, the integration of scientific knowledge with medical practice was integral to neurological practice throughout the nineteenth and early twentieth centuries. This idiomatic strategy was one that nerve specialists perpetuated, consciously or not, because it aided them in locating their practices within the dominant generalist discourse of medical culture. In other words, the dominant practices of medical culture consecrated the meaning and outcome of nervous practices, especially by integrating and assimilating neurological knowledge into medicine.

Practice and the Production of Neurological Knowledge

Like clinical nerve practice, neurological research throughout the late nineteenth and early twentieth century was expansive and demanded an integrative mindset. It was always located between scientific and medical questions about the nervous system, and (as has already been mentioned) these included questions about the role of the psyche.⁷²

‘Neurology’ opined one author ‘is a book, of which psychology and psychiatry are merely those chapters devoted to the activities at the psychic (or symbolic) functional level of the nervous system.’⁷³ Likewise, Eric Blake Pritchard (1899-1962) described neurology as a medical subject composed of ‘various clinical pictures’ including psychic

⁷² For an interesting explication, see the discussions of clinical and research practice in Francis Walshe, “Ferrier Lecture: The Contribution of Clinical Observation to Cerebral Physiology” *PRSM* Vol. 142, No. 907 (1954), pp. 208-224, 208-211, 215-217, 223-224; Walther Riese thought that John Hughlings Jackson had wanted the neurologist to deny volition and consciousness, see “An Outline of a History of Ideas in Neurology” p. 127; An early testimony to this pluralism appears in William Gowers, “An Address on Neurology and Therapeutics” *The Lancet* (1893), pp. 915-917.

⁷³ “Psychiatry and Neurology” *Journal of Mental Science* Vol. LXXII, (1926), p. 77.

and somatic parts.⁷⁴ In 1935, Frederick Golla (1878-1968) claimed the holistic and integrative spirit demanded by neurology was *the* essential difficulty of neurological practice. ‘We are all not a little embarrassed when we try to relate our particular viewpoints with those of others and to relate them to any generalised scheme of nervous function’.⁷⁵ In keeping with this pattern, the neurologist Gordon Holmes remarked a year later at the opening of the Montreal Neurologist Institute, that:

Our pride in the advances made by our specialty must not blind us to the risks of isolation from other branches of medicine, for the body lives and works as a whole, and though the nervous system plays a predominant part in the control and integration of the activity of all its organs, it is equally dependent on them, a lesson taught in the parable of the foot and stomach, each of which failed in its attempt to live its own isolated existence.⁷⁶

Hence, while neurological investigations ranged from biochemical to diagnostic studies of normal and abnormal functioning of nervous systems, the linkages between these different studies, as Golla and Holmes’ remarks suggest, were often ephemeral.

Nevertheless, labelling scientific research as specifically neurological could also be contentious. In the late nineteenth century, comparative neurology, one American critic

⁷⁴ E. A. Blake Pritchard, *Aids to Neurology* (London: Bailliere, Tindall and Cox, 1934), p. iii.

⁷⁵ My emphasis. F. L. Golla, “The Nervous System and the Organic Whole” *PRSM*, Vol. XXIX (1935), pp. 109-118.

⁷⁶ Gordon Holmes, “Foundation Lecture” in *Neurological Biographies and Addresses; Foundation Volume; Published for the Staff, to commemorate the Opening of the Montreal Neurological Institute of McGill University* (London: Oxford University Press, Humphrey Milford, 1936), p. 8.

judged, was little different from investigations in comparative anatomy or zoological studies.⁷⁷ For example, the physiology of Charles Sherrington (1857-1952), important in establishing theoretical foundations of modern clinical neurology, derived fundamental observations from comparative studies of the nervous system in the medusa, arthropods, and other lower invertebrates.⁷⁸ Even if such studies focused on the nervous system, their disciplinary boundaries were felt to be relatively fluid.

Though the emergence of clinical neurosurgery and neurology and their applied research methods began in the pathological mortuary and physiology laboratory, by the First World War, the clinical laboratory had begun supplanting those sites.⁷⁹ The American Harvey Cushing, following work by Rickman Godlee (1849-1925) and Victor Horsley (1857-1916) in Britain, developed his surgical practice around the experience of experiments he first conducted on animals or cadavers in Johns Hopkins laboratories.⁸⁰ Mortuary methods, such as practicing operations on corpses, continued to be a respectable means of researching neurological and psychiatric diseases, until the

⁷⁷ S. V. Clevenger "Comparative Neurology" *The American Naturalist*, Vol. 15, No. 1 (1881), pp. 16-24; idem, "Comparative Neurology continued," Vol. 15, No. 2 (1881), pp. 103-113.

⁷⁸ Charles Sherrington, *The Integrative Action of the Nervous System* (London: Archibald and Co., 1906), pp. 42-97.

⁷⁹ The trend was typical of medicine. There is a massive literature on this point. See, for a concise discussion, Steve Sturdy, "The Political Economy of Scientific Medicine: Science, Education and the Transformation of Medical Practice in Sheffield, 1890-1922" *Mhist*, Vol. 36 (1992), pp. 125-159.

⁸⁰ Michael Bliss, *Harvey Cushing: A Life in Surgery* (Oxford: Oxford University Press, 2005); Samuel Greenblatt, "Harvey Cushing's Paradigmatic Contribution to Neurosurgery and the Evolution of his Thoughts about Specialisation," *BHM*, Vol. 77 (2003), pp. 789-822. On Rickman Godlee, see Anthony Feiling, *A History of the Maida Vale Hospital for Nervous Diseases*, (London: Butterworth & Co. 1958), appendices, 1-3.

transition towards biochemical, bacteriological, and electrophysiological paradigms and protocols in the 1920s.⁸¹ Experiments on conditioned reflexes, for example, opened new territory in ethological experiments with immediate clinical ramifications.⁸² The laboratory was the site where behaviour became a reductive story of nerves, pathology, chemistry, and physics. Clinical neurological practices shifted accordingly and here new protocols and technologies were instrumental in the transformation of knowledge production. The Wasserman and Lange Gold Colloidal Tests became popular techniques for diagnosing syphilis early in the twentieth century.⁸³ X-rays, ventriculography, and electro-encephalography ushered in new methods of visualising the invisible confines of the skull in the interwar period.⁸⁴

⁸¹ See: E. D. Adrian "The Electrical Reactions of Muscles Before and After Nerve Injury," *Brain* Vol. 39 (1916), pp. 1-31; Alan Hodgkin, "Edgar Douglas Adrian, Baron Adrian of Cambridge. 30 November 1889-4 August 1977" *Biographical Memoirs of Fellows of the Royal Society*, Vol. 25 (1979), pp. 1-73, 16-19, 20, 24; On the changes wrought by bacteriology, see Oppenheim, *Shattered Nerves*, p. 196.

⁸² See: Robert Yerkes and Sergius Morgulis, "The Method of Pawlow in Animal Psychology," *The Psychological Bulletin*, Vol. VI, No. 8 (1909), pp. 257-273.

⁸³ See: John Marchildon, *The Wasserman Reaction: its technic and practical application in the Diagnosis of Syphilis* (London: Henry Kimpton, 1912); A Douglas Bigland, "On the Clinical Value of Routine Cerebro-Spinal Fluid Examination in the Diagnosis of Nervous Diseases" *The Lancet* (1920), 687; Cecil Worster-Drought, H. J. B. Fry, and G Roche Lynch, "Observations on the Colloidal Gold Reaction in Neurosyphilis" *The Lancet* (1922), pp. 1063-1065.

⁸⁴ "Walter Edward Dandy" *Journal of the American Medical Association*, Vol. 130 (1946), p. 1257; Walter Dandy "Ventriculography following the injection of air in the cerebral ventricles", *Annals of Surgery* Vol. 68 (1918), pp. 5-11; on EEG see David Millett, "Wiring the Brain: From the excitable cortex to the eeg, 1870-1940" PhD Diss., University of Chicago, 1998.

In the post-war period, these laboratory paradigms were renamed ‘neuroscientific’, usurping in turn the fundamental terminologies in the neurosciences.⁸⁵ Neurology became restricted to the idea of a clinical specialty, while neuroscience was broadened to cover various scientific disciplines related to the study of the nervous system. Nonetheless, neuroscience and neurology remained synonyms for a common practice.⁸⁶ It seems both terms embraced an underlying theoretical pluralism and multi-disciplinary approach, and they remained integrative and expansive in their focus, an observation true for textbooks and manuals throughout this period as well.

Producing and Reproducing Ambiguity: Manuals of Nervous Diseases

Physicians published textbooks pertaining to the nervous system and its diseases throughout the nineteenth century and after.⁸⁷ Like the status of the nerve specialists who wrote them, the texts were wide-ranging and expansive in their intellectual scope.⁸⁸ Producing these textbooks had many idiomatic advantages for these physicians, among which were: they functioned to systemise clinical practices, to unify an author’s experiences in clinical practice within the pages of one or two volumes, to pass-on

⁸⁵ See *OED* entries for ‘neuroscience’ and ‘neuroscientist’.

⁸⁶ Robert G Frank, “Instruments, Nerve Action, and the All-or-None Principle”, *Osiris* Vol. 9 (1994), pp. 208-235.

⁸⁷ This study of textbooks and books has benefited from three very different analyses. Firstly, Mary Smyth, “Certainty and Uncertainty Sciences: Marking the Boundaries of Psychology in Introductory Textbooks” *Social Studies of Science* Vol. 31, No. 3 (2001), pp. 389-416 clarified some important questions; and secondly I was inspired by the general style of source criticism found in Andrew Wear, *Knowledge & Practice in English Medicine, 1550-1680*, (Cambridge: Cambridge University Press, 2000). Finally, see Thomas Kuhn, *The Structure of Scientific Revolutions* 3rd Ed. (Chicago and London: University of Chicago Press, 1996), pp. 136-137, and 138.

⁸⁸ Lawrence McHenry, *Garrison’s History of Neurology* (Springfield: Charles Thomas, 1969), pp. 269-341.

neurological practices pedagogically, and to advertise specialist interests to a wider public.

By far the most important function of physician-authored texts was that they systemised knowledge of the nervous diseases, while communicating simultaneously, an author's first hand experiences in clinical practice. William Gowers (1845-1915), Professor of Clinical Medicine at University College Hospital, and Physician at the National Hospital, published his classic two-volume *Manual of Nervous Diseases* between 1886 and 1888.⁸⁹ Gowers' manual systematised diseases of the nervous structures and of the mind, and invented the first modern classificatory approach to these diseases.⁹⁰ It was the first book to make the distinction between functional and organic nervous ailments, and it is noteworthy that he claimed wide interests in both categories.⁹¹ Normally British nerve specialists like Gowers preferred treating and diagnosing organic nervous diseases only.⁹² Nevertheless, even in the 1920s, it remained a matter of practical experience and professional choice that most nerve specialists saw both types of patients.⁹³

Late Victorian and Edwardian neurological manuals had similar layouts and subject matter. They presented rudimentary practical and theoretical information about the

⁸⁹ William Gowers, *A Manual of Diseases of the Nervous System* Volume 1 and 2 (London: J. &A. Churchill, 1892).

⁹⁰ Henry Miller, "Personal Book List: Neurology" *The Lancet* (1968), p. 972.

⁹¹ William Gowers *Diseases of the Nerves and Spinal Cord*, Vol. 1 2ed., p. 1; Lawrence McHenry, *Garrison's History of Neurology*, p. 345.

⁹² Janet Oppenheim, *Shattered Nerves*, pp. 14-31.

⁹³ "The Borderland Patient" *JNP*, Vol. 6 No. 24 (1926), pp. 301-302.

anatomy and physiology of the nervous system, and then proceed to discuss the diagnosis of various conditions. Somewhere within many of these texts would be an appendix, chapter, or section describing methods for taking case histories and conducting a detailed neurological examination. These sections articulated and ordered the authors' bedside practices. Ways of taking the history of the patient and examining him or her juxtaposed to discourses on pathology, anatomy and physiology. Thus, the manuals reproduced both physical and intellectual practices.⁹⁴

A common manual before the First World War was *The Diagnosis of Nervous Diseases*, by James Purves Stewart (1869-1949). First published in 1906, translations of 'the best book of the kind in the English language' subsequently appeared in many languages, with its ninth and final edition appearing in 1945.⁹⁵ Purves Stewart had relied on his experience with 'clinical material' at Westminster Hospital to frame the book's multiple subjects. His alleged goal was to avoid 'abstruse details of theoretical interest' and to focus on diagnosis while 'treatment is not discussed'.⁹⁶ The book began with lectures outlining the anatomical and physiological knowledge required for accurate diagnosis of the nervous system: 'there is no department of medicine where an accurate knowledge of

⁹⁴ Indeed, the empirical approach was often summarised for general physicians located in military theatres. See, for instance, Leo Alexander, "The Neurologic Examination" in ed. Roscoe Pullen *Medical Diagnosis* (W B Saunders and Co: 1944), pp. 773-820; See also, WL, PP/CPS/9 Sir Charles Symonds Off-Prints 1938-1943, M.R.C. War Memorandum No. 4; a much later and fascinating volume from America is, Department of Army Technical Manual, *Medical Corpsman and Medical Specialist* (TM 8-230: Unites States Army, 1961).

⁹⁵ [Private Collection], Edwin Bramwell, *Rough Notes and Recollections 1945*, Section titled "Sir James Purves Stewart KCMG CB MD FRCP".

⁹⁶ James Purves Stewart, *The Diagnosis of Nervous Diseases* (London: Edward Arnold, 1906), pp. iii-iv.

anatomy is of greater importance'.⁹⁷ Though clinical practice in nervous diseases required scientific knowledge, a particular value system distinguished neurologic practice. Early on in his text, Purves Stewart launched into general maxims ostensibly explaining methods of examining the patient, but really rendering that value system into succinct rules of practice. He wrote, for example, that 'examination of a nervous case should not be confined to the nervous system alone. All the systems of the body should be investigated. An accomplished neurologist must be in the first place a sound physician.'⁹⁸

Between 1880 and 1940, the content of the textbooks and manuals remained broad. The strategies these texts employed for systematising knowledge, routinely merged diagnoses and treatment of functional and organic nervous diseases. Sometimes, authors placed more emphasis on scientific theories than on practical diagnosis, but in general, most manuals maintained the broadest definition of neurology – a strategy that increased their potential audiences to include asylum physicians and psychiatrists. Donald Core (1882-1934), a physician in Manchester, published *The Examination of the Central Nervous System* in 1928, which included chapters on mental states, epilepsy, x-rays, and neurosurgical intervention, as well as his recommended method for examining suspected functional patients.⁹⁹ In the 1940 edition of his *Diseases of the Nervous System*, Walter Russell Brain (1895-1966), Physician at the London Hospital, sadly mulled the fact that 'the enormous developments of medical psychology makes it impossible to consider in detail the aetiology and treatment of the neuroses in this text-book of neurology...I have

⁹⁷ Ibid., p. 1.

⁹⁸ Ibid., p. 38.

⁹⁹ Donald Core, *The Examination of the Central Nervous System*, (Edinburgh: Livingstone, 1928).

added a new chapter on The Psychological Manifestations of Organic Nervous Disease.’¹⁰⁰ In his 1945 textbook, *Introduction to Clinical Neurology*, a book that became ‘the physiological basis for the interpretation and elucidation of neurological disorders,’ the neurologist Gordon Holmes, renowned for his impatience with cases of functional diseases, admitted the psychological aspects of neurological diseases.¹⁰¹ His comments, though, were terse and reserved. ‘Abnormal suggestibility,’ he wrote, ‘is the essential basis of the palsies, spasms and other physical symptoms of hysteria, the essential nature of which is conversion of an idea into symptoms.’¹⁰²

However, judging simply by first-edition titles of British textbooks and manuals, it seems evident that they narrowed their scopes between 1880 and 1960, suggesting the subject was acquiring a more restricted definition. Representative titles appear below in Table 2.1. What is of chronological interest is the changing nature of the titles. Note that ‘diseases of the nervous system’ gradually became ‘nervous diseases’ and eventually the word ‘neurology’ appeared. Strikingly, only scientific treatises – i.e. *Studies in Neurology* and *Modern Problems in Neurology* – used the word neurology; authors only adopted the term for their clinical textbook titles after 1940. Furthermore, the authors of the scientific treatises, Henry Head and Samuel Alexander Kinnier Wilson respectively, were both figures agitating for reforms in the professional status of neurology. Indeed Kinnier

¹⁰⁰ W. Russell Brain, *Diseases of the Nervous System* 2ed (London: Churchill, 1940), p. iii.

¹⁰¹ C. S. Breathnach, “Sir Gordon Holmes” *Mhist* Vol. 19, No. 2 (1975), p. 196.

¹⁰² Gordon Holmes, *Introduction to Clinical Neurology*, (Edinburgh: Livingston, 1945), p. 176.

Wilson was unique among his colleagues for being described a ‘distinguished neurologist’ in his *London Times* obituary.¹⁰³

Table 2.1: Titles of ‘Neurological’ Books Published in Britain

<i>Clinical Lectures on Diseases of the Nervous System</i>	1882
<i>A Manual of Diseases of the Nervous System</i>	1886-88
<i>The Diagnosis of Nervous Diseases</i>	1905
<i>A Textbook of Nervous Diseases</i>	1910
<i>Diseases of the Nervous System</i>	1912
<i>Studies in Neurology</i>	1920
<i>Diseases of the Nervous System</i>	1921
<i>Pathology of the Nervous System</i>	1921
<i>Modern Problems in Neurology</i>	1928
<i>The Examination of the Central Nervous System</i>	1928
<i>The Commoner Nervous Diseases for General Practitioners and Students</i>	1931
<i>Diseases of the Nervous System</i>	1933
<i>Neurology</i>	1940
<i>Introduction to Clinical Neurology</i>	1946
<i>Modern Trends in Neurology</i>	1951
<i>Clinical Neurology</i>	1960

Who were the audience for these manual and textbooks? The answer is unclear. Judson Bury’s (1852-1944) 1912 *Diseases of the Nervous System* claimed that:

In a class which I have conducted at the Manchester Royal Infirmary for the last twenty years, a description of the chief neuronic systems has been followed by the bringing forward of cases illustrating the various forms of paralysis and of other symptoms in relation to lesions of the corresponding neurons. In this way the student obtains a grasp of

¹⁰³ “Dr. Kinnier Wilson, A Distinguished Neurologist” *Times* (London), 13 May 1937, p. 5.

the principles of anatomical diagnosis, and is soon willing to admit that the investigation of diseases of the nervous system is less terrible than he previously supposed.¹⁰⁴

While it is tempting to argue that textbooks and manuals were for medical students alone, Bury's comments reveals problems with this view. In medical school, students learned about patients and diagnosis through clinical demonstrations, and cases of nervous diseases were particularly challenging subjects. Edwin Bramwell commented, for example, that:

The cases are usually puzzling problems sent up by keen doctors, from whom the patient often brings an excellent letter. But this is not the kind of material, which is useful for teaching purposes even to senior students. It can it is true demonstrate principles in diagnosis and impress the student with the fact that many of the cases which he will meet with when *he enters practice do not conform to textbook descriptions*, but this is apt, is it not to prove confusing?¹⁰⁵

Such confusion may have prevented students from reading manuals extensively – they were a library resource for confirming diagnosis but not books to read from cover to cover.¹⁰⁶ Keen physicians and general practitioners, in contrast, already practicing medicine and more experienced with curious and challenging cases than medical

¹⁰⁴ Judson Bury, *Diseases of the Nervous System* (Manchester: University Press, 1912), p. vii.

¹⁰⁵ My emphasis. [Private Collection], Edwin Bramwell Diary, 10 October 1934, p. 23.

¹⁰⁶ "The Undergraduate Training in Neurology" *JNP*, Vol. 10, No. 40 (1930), pp. 328-331.

students, might have found them more useful. Moreover, general practitioners served as primary nodes in referral networks to the consultants who wrote the texts.

Generally, the practice of publishing was a means of advertising. Establishing expertise through the publication of a rigorous volume on a restricted subject was a means of publicising knowledge and skills, otherwise difficult to communicate in a culture opposed to specialist practice and self-promotion.¹⁰⁷ Likewise, because medical publishing was one means of generating an income, the existence of manuals of nervous diseases is not necessarily indicative of attempts to establish an educational system for students in neurology. As William Broadbent wrote to his brother in 1868, 'I am working away at my experiments. The same time and labour spent on other work, such as concocting a book on some disease or other, would pay sooner and perhaps better, but I look forward.'¹⁰⁸ Much later, Frederick Nattrass (1891-1979), a physician in Newcastle would publish *The Commoner Nervous Diseases for General Practitioners and Students* with

¹⁰⁷ Publishing manuals indicated status and authority, and functioned therefore as a way of communicating broader agendas to the profession. In an amusing example, William Gowers published a manual titled *Problems in Practical Diagnosis* in 1909, which was ultimately unreadable because it was published in shorthand type-set. This phonographic record of his clinical lectures presumably served to further his known agenda to make all medical students learn shorthand. In this case, the agenda was one doomed for failure; moreover, it permanently obscured his remarks in this volume for all eternity; William Gowers, *Problems in Practical Diagnosis*, (London: Pulman & Sons, 1909); also see Kenneth Tyler and H Richard Tyler, "Sir William Richard Gowers (1845-1915): exhumation and decoding of his shorthand publications" in F. Clifford Rose ed. *A Short History of Neurology: the British Contribution*, pp. 208-221; It is interesting to note in passing, that references to shorthand and its desirability in practice to physicians, appeared occasionally even in nineteenth century literature. See, for example, Wilkie Collins, *The Moonstone* (Wordsworth Classics, 1993), p. 344.

¹⁰⁸ M. E. Broadbent ed. *The Life of Sir William Broadbent*, (London: John Murray, 1909).

the aim of still providing ‘fundamental information required by general practitioners’.¹⁰⁹ Certainly, one remunerative aspect of these manuals lay in their consumption by advanced medical readers such as physicians practicing general medicine. Yet, the remunerative aspect was not in selling the book, but mainly in advertising one’s ‘broad’ knowledge.

Although it is thus difficult to determine to what extent or in what sense the numerous textbooks published throughout the nineteenth and early twentieth century were intended as pedagogical tomes for undergraduates, it can be assumed that they functioned more in this way as the twentieth century proceeded. Yet, as we shall see, because neurological departments in universities and accompanying professorships in the subject were nonexistent in Britain, and because post-graduate education in the specialty was for a privileged few at the specialist hospitals, it is likely general readers of various interests were also part of the market for these classics.

One reason British neurological interests maintained their broader medical outlook, was that breadth of interest maintained a larger consumer market for their publications. Likewise, they were advertisements of these practitioners’ knowledge of the nervous system and its diseases.¹¹⁰ Beyond these inferences, however, one fact remains especially

¹⁰⁹ Frederick Nattrass, *The Commoner Nervous Diseases for General Practitioners and Students*, (London: Oxford University Press, 1931), p. ii.

¹¹⁰ Charles Mercier, for example, advertised his book “Asylum Management and Organisation” in the London (Times) where he emphasized his occupational status as a “Lecturer in Neurology and Insanity”. *Idem.*, *Saturday, May 19, 1894, 16, Issue 34268 Col. C*; *idem.*, *Saturday, May 26, 1894, 16 Issue 34274, Col. D*; *idem.*, *Saturday, June 02, 1894, 16 Issue, 34280 Col. A*.

clear: the broad, encompassing spirit of the books was their defining feature. This desire to keep neurology diverse, encompassing, and rigorous, reflected the institutional realities of British medicine, and the embedded status of their authors. Similarly, though not surprisingly, this generalist vision was visible in the journals and professional societies that took neurology as their subject in the late nineteenth and early twentieth centuries. Considerations of best generalist practices underwrote much of what were normative practices on nervous diseases, and that ethos of generalism was what nervous practices subsequently sought to reproduce even as they became more restricted in their focuses.

General Practices in Journals and Societies

Neurology, as I have noted, encompassed a broad array of subjects: everything from the psychological to the physiological, and this pluralism could have caused frequent political crises over the form journals and societies assumed.¹¹¹ *Brain, a Journal of Neurology* arrived on the scene in 1878.¹¹² Retrospectively, it seems that two factions of nerve specialists founded this journal, i.e. two of its four founding editors were interested

¹¹¹ Cf. The most relevant literature is on neurological journals and societies, is for those in America. See, John Burnham, "The Founding of the Archives of Neurology and Psychiatry; or, What Was Wrong with the Journal of Nervous and Mental Disease?" *Journal of the History of Medicine and Allied Sciences* Vol. 34 (1981), pp. 310-324; also see Russell DeJong, *A History of American Neurology* (New York: Raven Press, 1982), pp. 139-144. I sought circulation information for *Brain*, *Review of Neurology and Psychiatry*, *The Archives of Neurology and Psychopathology*, and *Mind*. The only information I located was for *Brain*, which had 273 subscribers in 1905.

¹¹² Chandak Sengoopta, "A Mob of Incoherent Symptoms? Neurasthenia in British Medical Discourse, 1860-1920" in ed. Marijke Gijswijt-Hofstra and Roy Porter (eds.) *Cultures of Neurasthenia: From Beard to the First World War* (Amsterdam and New York: Rodopi, 2001), p. 107.

in functional nervous diseases while two others were interested in organic diseases.¹¹³ It is important to note that when *Brain* appeared, an obvious corollary to it already existed, embodied in the philosophical and psychological journal *Mind*, founded in 1876.¹¹⁴ Whether the foundation of *Brain* was a response to *Mind*, reflecting emergent ‘polemical’ preferences for grounding psychological thinking in experimental research will not be analysed here, but this would be a study well-worth carrying out and is probably more indicative of the ‘real’ factions over practice existing between nerve practitioners in this period.¹¹⁵ In any case, *Brain* became the most important neurological journal in Britain. As I will show in Chapter 3, it was associated subsequently with the Neurological Society of London, which formed in 1886, and when that society dissolved to join the Royal Society of Medicine, *Brain* continued autonomously. Its editors, remembered as charismatic and important figures in British neurological history, included: Henry Head (1861-1940), Gordon Holmes, Francis Walshe, and Walter Russell Brain.¹¹⁶

¹¹³ Macdonald Critchley and Eileen A Critchley, *John Hughlings Jackson: father of English Neurology* (New York: Oxford University Press, 1998), ch. 18.

¹¹⁴ “The Story of ‘Brain’. Complimentary Dinner to Dr Head.” *BMJ* (1924), pp. 880-881; see also, Rose, *Psychological Complex*, p. 4.

¹¹⁵ Some preliminary thoughts on these polemic tendencies appear in: L. S. Jacyna, “Somatic Theories of Mind and the Interest of Medicine in Britain, 1850-1879” *Mhist*, Vol. 26 (1982), pp. 233-258, especially 257, quote on 258; Some evidence for considering the relationship between both journals can be found in these articles and reviews: W R Gowers, “Reports: Pathological” *Mind* Vol. 1, No. 4 (1876), pp. 552-554; “Clinical and Physiological Researches on the Nervous System: on the localisation of movements in the Brain” *Mind* Vol. 1, No. 1 (1876), pp. 125-127; James Sully, “Dr Hughlings Jackson on Morbid Affections of Speech,” *Mind* Vol. 5, No. 17 (1880), pp. 105-111.

¹¹⁶ See Appendix A, List A3.

There were other British neurological journals. Alexander Bruce (1854-1911) had founded the Edinburgh based *Review of Neurology and Psychiatry* in 1899. When Bruce died, the *Review*, in severe debt, ceased publication, but Samuel Alexander Kinnier Wilson (1874-1937), married to Bruce's daughter, thought an alternative to *Brain* desirable. Kinnier Wilson's younger friend, Ronald Gordon (1889-1950) remembered the new journal's origins in Kinnier Wilson's obituary:

In 1920 Kinnier Wilson and a few others decided that a second journal devoted to neurology would be beneficial...at the same time the almost new science of psychopathology was very much in the public eye, and, moreover, in serious danger of losing its moorings by becoming entirely divorced from the study of anatomy, physiology, and pathology of the nervous system. In these circumstances a small committee was formed, representative of the various neurological and psychological interests concerned, to found a journal devoted to both branches of study.¹¹⁷

Thus, in 1920 Kinnier Wilson founded *The Journal of Neurology and Psychopathology* and published it under that name until 1937, the year in which he died. Subsequently its editorial team changed its name to *The Journal of Neurology and Psychiatry*. According to its new editor, Edward Arnold Carmichael (1896-1978), the new journal's policy was 'to publish articles dealing chiefly with the objective side of psychiatry; to have critical reviews of various subjects and to undertake to be a key to recent medical literature rather

¹¹⁷ "Obituary: Samuel Alexander Kinnier Wilson," *BMJ*, 22 May 1937, 1093-1095.

than a complete abstract service.¹¹⁸ The name changed yet again in 1944 to *The Journal of Neurology, Neurosurgery, and Psychiatry*.¹¹⁹ The journal was, as its various names suggest, always multidisciplinary.

Another journal publishing many neurological papers and comments was the *Proceedings of the Royal Society of Medicine*, established, along with that Society, in 1907. Though as an historical source it is under-utilised and frequently misunderstood, *The Proceedings* was an extremely important organ. It carried the full proceedings of meetings of the Royal Society of Medicine's Section of Neurology throughout each year until the late 1920s; transcripts of presidential addresses and special lectures, presentations of clinical cases and original research, as well as documented conversations between many neurologists, often verbatim.¹²⁰

One notable feature of *The Proceedings* was its transcripts of joint discussions between two or more of the society's sections. Because *The Proceedings* and Society's aim was to promote the unity of medicine, these joint discussions represented ways of breaking down the barriers caused by medical specialism. These mirrored the participation of the society's members. Edward Farquhar Buzzard (1871-1945), as one example, gave addresses to the Clinical, Anaesthetics, and Otology Sections. Similarly, a President of

¹¹⁸ Edward Carmichael to Daniel O'Brien, 14 June 1937, folder 269, box 20, series 401, Record Group (RG), 1.1, Rockefeller Foundation Archives, Rockefeller Archive Centre, Sleepy Hollow, New York (hereafter, RAC).

¹¹⁹ Macdonald Critchley, *The Divine Banquet of the Brain and Other Essays*, (New York: Raven Press, 1979), p. 191.

¹²⁰ A bibliography for this journal appears in the Appendix E.

one section might later become President of another. Farquhar Buzzard, again, was President of the Section of Psychiatry from 1920-1921, the Section of Neurology from 1924-1925, and the Section of Medicine from 1933-1934. He participated regularly in the proceedings of each.¹²¹ We might consider Buzzard, remembered as a great Regius Professor of Medicine at Oxford, a neurologist, yet that view is narrow given the range of his interests and professional work. Buzzard, like the Royal Society of Medicine, held generalist practice above specialist knowledge, and his generalism coincided nicely with neurology's expansive outlook. This discussion of Edward Farquhar Buzzard's identity is an appropriate place to note that often the occupational identities of practitioners, now remembered as neurologists, could be various and diverse, and nowhere is that shown more clearly than through an analysis of their obituaries. What these practitioners did in practice is often at odds with how historians describe what they did in processes.

Representations of Practice in Obituaries

Because in the late nineteenth century there were few medical institutions officially recognising practitioners with interests in the nervous system, and because medical culture generally was opposed to specialist practice, very few individuals, with good reason, desired the label 'specialist in nervous diseases'. Aside from publications, the reinforcement of their social identities was reflected in yet another source, obituaries. Obituaries, however, are problematic sources, and it is first worth expanding this point, before continuing with the analysis.

¹²¹ A. M. Cook, *Sir E. Farquhar Buzzard, Bt., K.C.V.O., D.M., F.R.C.P. An Appreciation* (Royal Society of Medicine, 1975), p. 12.

As a primary source, the genre of obituary has received surprisingly little attention.¹²² Medical obituaries, authors have noted, are idiosyncratic sources for historical research.¹²³ Most historians rarely enquire into the practice of obituary writing, i.e. how obituaries are produced, what they reproduce, and what they reveal about culture and communities.¹²⁴ The usual conventions of the genre mix an individual's biographical context with observations from an often anonymous author. Often the observations are sentimental; they may take the form of hyperbole in their descriptions of the deceased. A medical obituary critical of its subject is rare. One openly critical about the state of the medical community is less exceptional. Complicating this picture, obituaries are also announcements of an important event – they communicate the news of a death.¹²⁵ In this sense, they serve an immediate function, which has a politicising effect on their production because they represent an official record. What is 'said' of the deceased

¹²² One study of public memory and how obituaries express public values is Janice Hume, *Obituaries in American Culture* (University of Mississippi Press, 2000); A gender analysis appears in Mushira Eid, *The World of Obituaries: Gender Across Cultures and Over Time* (Wayne State University Press: Detroit, 2002). Also see comments in: Stephen Botein, Jack Censer, and Harriet Ritvo, "The Periodical Press in Eighteenth-Century English and French Society: A Cross-Cultural Approach", *Comparative Studies in Society and History* Vol. 23 No. 3 (1981), pp. 484-486; Susan Budd, "The Loss of Faith. Reasons for Unbelief among Members of the Secular Movement in England, 1850-1950", *Past and Present* Vol. 36 (1967), pp. 106-125; Gary Long, "Organisations and Identities: Obituaries 1856-1972", *Social Forces*, Vol. 65 No. 4 (1987), pp. 964-1001.

¹²³ Anne Digby, *The Evolution of British General Practice*, pp. 5-8; A. Crowther and M. Dupree, "The Invisible General Practitioner: The Case of Scottish Medical Students in the Late Nineteenth Century", *BHM*, 70 (1996), pp. 388, 390. The major theoretical text is Pierre Bourdieu, *Homo Academicus*.

¹²⁴ However, representations of death in cenotaphs have been carefully considered. See, Robert Pogue Harrison, "The Names of the Dead" *Critical Inquiry* Vol. 24, No. 1 (1997), pp. 176-190.

¹²⁵ As Freud would have it, death is our last important event. "Towards the actual person who has died we adopt a special attitude – something almost like admiration for someone who has accomplished a very difficult task." Sigmund Freud, "Our Attitude towards Death" in Angela Richards and Albert Dickson eds. (Volume 12) *Civilization, Society, and Religion* (London: Penguin Books, 1991), p. 78.

invariably also communicates attitudes and perspectives about the author or publisher – a fact that can have serious repercussions for the author and publisher if the deceased is a controversial figure.¹²⁶

Obituaries are commemorative, and indeed may help to construct a community's identity. One odd effect of obituaries is that they create the illusion of progress simply by focusing upon the death of valued members of a community. In my view, the praxis of a community strengthens as the number of its obituaries increases, because death reinforces collective meanings and experiences of work. In terms of defining a narrower community within the medical profession, we might judge that a clinical specialty has actualised when obituaries identify the deceased with the specialty only and ignore wider agendas of the medical profession. In the case of Britain, where specialization in medicine was a tenuous process, this obituary analysis offers detailed insights.

The obituaries of members of the Neurological Society of London (founded in 1886) or the Association of British Neurologists (founded in 1933) reveal interesting ambiguities in their depictions of professional identity. It was only after the Second World War that 'neurologist' became a stable identifier in obituaries.¹²⁷ Thus, it is common to find

¹²⁶ Trong R Chai, "A Content Analysis of the Obituary Notices on Mao Tse-Tung", *POQ* Vol. 41 (1977), pp. 475-487.

¹²⁷ On this ambiguity see: Report of the Committee on Neurology, Royal College of Physicians, July 1945, 1-17; *Future Needs of Neurological Staffing*; Royal College of Physicians – Committee on Neurology – 13C Minutes of the Committee of Neurology (Volume 1 1944-1966) RCPA; Also see Stevens, *Medical Practice*, pp. 42-43; Table VII Consultant Numbers in Charles Webster, *The Health Services Since the War*

deceased members of the Neurological Society of London described as physicians only (although a few were described as physicians and also neurologists). In contrast, original members of the Association of British Neurologists (ABN) were described as, ‘physicians with a special interest in neurology’, while later authors remembered members of younger generations within the ABN as ‘neurologists’. There were some exceptions in all cases, but neurology’s broader outlook made identification (and self-identification) of a specialist occupationally and socially difficult to determine.

Partly, we could explain the hybrid identity of these physicians as rhetorical artifice, defending dispositions and habits Christopher Lawrence has termed ‘patrician’.¹²⁸ Certainly, physicians with interests in neurology fitted that archetype; their lucrative private practices, multiple appointments in voluntary hospitals, as well as their characteristic admirations and temperaments typified the patrician. Many would not have admitted that their interest in neurology amounted to accepting a specialism, and they would have argued theirs was a broader knowledge of general medicine, because it

(Vol. 1) *Problems of Health Care The National Health Service Before 1957*, (HMSO, London: 1988), p. 310.

¹²⁸ Christopher Lawrence, “Still Incommunicable: Clinical Holists and Medical Knowledge in Interwar Britain” in Lawrence and Weisz (eds.) *Greater than the Parts, Holism in Biomedicine, 1920-1950*. (Oxford and New York; Oxford University Press: 1998), p. 96.; The word “hybrid” comes from Joseph Ben-David and Randall Collins, “Social Factors in the Origins of a New Science: The Case of Psychology”, *American Sociological Review*, Vol. 31 No. 4 (1966), pp. 451-464, specifically 459-465; It seems as good as any to me, but we could substitute: interdisciplinary, eclectic, etc. The point is that theirs was a broader view, and not seen as a narrower one.

included the esoteric disorders of the nervous system. This was a claim for clinical superiority.¹²⁹

Interestingly the *rhetoric of the patrician* was rare in the obituaries of neurologists between 1920 and 1960, and when it did appear, it was usually critical of the state of the medical profession.¹³⁰ The obituary of Donald Elms Core recorded that ‘in a world of bustle and hurry Core belonged to the old-world type of physician who believed in the pre-eminence of his own disciple of medicine over others, in a manner worthy of the seventeenth and eighteenth century.’¹³¹ In what way Core reflected such manners and customs in his Manchester practice is untold, and it is difficult to understand how the author intended a reader of Core’s obituary to perceive the remark.¹³² It seems clear though that the author of Core’s obituary fashioned a representative portrait of the man to communicate general cultural values medical men should emulate.

¹²⁹ It is interesting to note that with the advent of the merit awards in the NHS, neurology along with thoracic surgery garnered the highest percentage of distinctions in the teaching hospitals for any specialties. Almont Lindsey, *Socialised Medicine in England and Wales, The National Health Service, 1948-1961*, (Chapel Hill; University of North Carolina Press, 1962), p. 345.

¹³⁰ The total number of individuals in my entire analysis is 200, but for this study of obituaries 100 members of the Association of British Neurologists were used, the number of obituaries available for those neurologists totalling 294. Further details for the statistical portion of this study were being supplemented by Munk’s Roll, and other biographical sources, including student records. When I could find them, I used sources from personal papers collections, the MRC archives, and the Ministry of Health.

¹³¹ Donald Elms Core, M.D. Manch., F.R.C.P. Lond. *The Lancet*, 17 February 1934, p. 377.

¹³² His textbook offers few hints of such behaviour. His chapter “X-Ray’s and the Nervous System”, for example, makes no reference to it as a tool to be used only after the history has failed to turn up the problem. Donald Core, *The Examination of the Central Nervous System* (Edinburgh, E. & S. Livingstone, 1928), pp. 209-217.

Another obituary, locating itself in the debate about the value of science for medicine, adopted the position that medical practice should not be dependent upon the laboratory but rather bedside practice.¹³³ It describes William John Adie (1886-1935) as a general physician *and* expert neurologist who ‘only reached out for the diagnostic aids of the laboratory and x-ray department when those could amplify and check what he had already discovered by thorough bedside examination’.¹³⁴ In 1952 this patrician theme was echoed in Edwin Bramwell’s obituary, where the author admits that while Bramwell had been ‘at his best in his clinical neurological demonstrations’, he had ‘all of the qualities of a great physician, with an old-fashioned courtly demeanour much to be admired in these strenuous days.’¹³⁵ Here was a hint of concern that the values of medicine – i.e. medicine as an art rather than a technocratic, bureaucratised practice – were somehow diminishing with the passing of Bramwell’s generation.

Perhaps such claims were mere rhetorical posturing by specialists. The merit of this argument is that it reveals ways specialists could have strategically avoided generalists’ misgivings about the increasingly specialised nature of British medicine in the interwar period. Nevertheless, belying this point is the fact that most of the deceased physicians

¹³³ Similar obituaries entering into the debate of science’s ideological value for medicine include: J. L. Birley, M.D., F.R.C.P. *BMJ*, 17 March 1934, p. 510; William John Adie, M.D., Edin., F.R.C.P. *The Lancet*, 23 March 1935, 717; James Stansfield Collier, M.D., F.R.C.P. Lond. *The Lancet*, 16 February 1935, p. 403.

¹³⁴ William John Adie, M.D., Edin., F.R.C.P. Lond. *BMJ*, 23 March 1935, pp. 624-625, p. 624.

¹³⁵ Edwin Bramwell, M.D., LL.D. Edin., M.D., Melb., F.R.C.P., F.R.C.P.E., *The Lancet*, 5 April 1952, pp. 726-727; for a discussion of Bramwell’s patrician ethos, see Christopher Lawrence, *Rockefeller Money, the Laboratory and Medicine in Edinburgh, 1919-1930: New Culture in an Old Country*, (University of Rochester Press, 2005).

had not worked in specialised departments or specialist hospitals for neurology. For them, a general medical outlook had been necessary.

Physicians and would-be specialists (now remembered as neurologists) were located in general hospitals and teaching hospitals. Many even viewed developments in neurology's specialization with apprehension.¹³⁶ Although changes were occurring in neurology in the teaching hospitals, neurology remained unrepresented within the hospital system. Between 1920 and 1960, authors routinely gave physicians active in neurology a hybrid status in their obituaries, which befitted such institutional locations. (Only seven claimed the deceased to be a pure neurologist.) The President of the Royal College of Physicians of Dublin, Francis Carmichael Purser (1876-1934) maintained 'his practice as a general physician' despite 'a special interest in neurology'.¹³⁷ Ronald Grey Gordon held eclectic interests in neurology, hydrology, child guidance, and psychiatry, and his *Lancet* obituary identified further interests in hysterical and rheumatic conditions.¹³⁸ Gordon's obituary in the *British Medical Journal* memorialised his 'manysidedness' which 'was reflected in his appointments.'¹³⁹ As late as 1960, Conrad Meredyth Hinds Howell (1877-1960) was remembered as being 'primarily a neurologist' but it was admitted that, 'he was also a general physician of wider knowledge and experience'.¹⁴⁰

¹³⁶ See, for instance, Edwin Bramwell, Diary; 6 Feb. 1935, [Private Collection], p. 222.

¹³⁷ Francis Carmichael Purser, M.D. Dub. *The Lancet*, 10 March 1934, p. 545.

¹³⁸ Ronald Grey Gordon, M.D., D.Sc., Edin., F.R.C.P.E. *The Lancet*, 13 May 1950, p. 932; R. G. Gordon, M.D., F.R.C.P.Ed. *The BMJ*, 6 May 1950, pp. 1080-1082.

¹³⁹ R. G. Gordon, M.D., F.R.C.P.Ed. *The BMJ*, 6 May 1950, p. 1081.

¹⁴⁰ Conrad Meredyth Hinds Howell, M.A., D.M., Oxon., F.R.C.P., *The Lancet*, 21 May 1960, p. 1136.

This amalgam of identities reveals how embedded neurological practice was in general medical culture, and it emphasises the weakness of defining neurology retrospectively. Increasingly it is true that this community of physicians began identifying themselves with a tradition of neurology. Throughout the 1960s and 1970s, authors remembered an increasing number of members of the Association of British Neurologists as neurologists only – even when institutional positions contradicted that fact.¹⁴¹ By 1980, the transition was absolute. However, the transition was slow, and neurology hybridised with subjects like psychological medicine, psychiatry, or with general medicine along the way. The next and final sections investigate ways the practices producing institutions promoted and mediated that transition to the identity of ‘neurologist’.

Practices Producing Neurological Institutions, 1880-1960

By now it should be clear that neurologic practice between 1880 and 1960 was fluid and embedded within generalist medical culture, and that by the interwar period trends towards a more restricted definition became visible. Partly this restriction resulted from the institutionalisation of clinical neurology, which really began in the interwar period. It is important to place these developments in context, for neurology was mirroring the changing circumstances of medicine in Britain.¹⁴² The institutional trends are interesting because they reveal changing practices in medicine that made the identification

¹⁴¹ Eric Alfred Blake Pritchard, M.A., M.D. Cantab., F.R.C.P. *The Lancet*, 23 June 1962, p. 1361; Frederick Lucien Golla, O.B.E., B.M. Oxon., F.R.C.P. *The Lancet*, 17 December 1968, p. 367; Helen Dimsdale, M.D. Cantab., F.R.C.P., *The Lancet*, 7 May 1977, p. 1018; Charles Putnam Symonds, *The Lancet*, 23 and 30 December 1978, pp. 1389-1390; Richard Sydney Allison, *The Lancet*, 20 May 1978, pp. 1108-1109. See Appendix C for career information.

¹⁴² Weisz, *Divide and Conquer*, 43.

‘neurologist’ possible. Arriving at a general institutional picture of neurology in Britain has not been easy, because the sources are fragmented and scattered. Using secondary histories of hospitals in the manner of Brian Abel-Smith in his sociological study of the evolution of hospitals has provided a spectrum of references to details aiding an examination of the appearance of departments of nervous diseases and neurology in Britain.¹⁴³ However, few histories written before 1940 describe such departments, and that absence of evidence does not mean neurologic services went un-provided. Histories written after 1940, on the other hand, frequently mention neurology, and the picture those books capture of neurology’s emergence is useful. The analysis of the rest of this section has therefore also been crafted from a number of other important sources: obituaries, as well as, archival information and biographical materials where available. What is clear retrospectively from this survey is that British neurological practice, though much in evidence by 1925, was institutionally, politically, and socially marginal, a point (if somewhat anachronistic) that emerges clearly in the following analysis of institutions.

Inspecting Interwar Neurological Institutions: W. Russell Brain’s Retrospective Report

Given the ambiguities mapped in previous sections, it is not surprising that some physicians deemed neurology’s situation in London unsatisfactory. Walter Russell Brain, a Physician at the London Hospital and President of the Royal College of Physicians between 1950 and 1957, for instance, found the status quo appalling.¹⁴⁴ In Brain’s view,

¹⁴³ Abel-Smith, *The Hospitals, 1800-1948*, the only mention of neurology is on p. 16.

¹⁴⁴ Royal College of Physicians London Archives, MS 3133-3296 (Hereafter: ARCP, Russell Brain Papers), W. Russell Brain, “The Organisation of Neurology in London After the War”, [undated – c1945-1952], Walter Russell Brain Personal Papers Collection.

the three specialists nerve hospitals (built in the mid-to-late nineteenth century) provided an inadequate service for London. The National Hospital had 150 continually occupied beds, and it maintained a small convalescent home in East Finchley with 30 beds. There were twelve physicians, three surgeons, and one pathologist on staff, and numerous medical officers and nursing staff.¹⁴⁵ All of the work passing through the hospital was handled by twelve individuals and their juniors. This meant that responsibilities for research, postgraduate teaching in neurology and patient care (not to mention private practice) fell completely on the shoulders of a few physicians that were already burdened by practice in a London teaching hospital.

Brain felt the situation at the Maida Vale Hospital for Nervous Diseases equally deplorable.¹⁴⁶ With 85 beds, nine physicians, two surgeons, six psychiatrists and medical officers and nursing staff, the hospital staff was already overburdened with research and care, and yet also offered courses for the Diploma in Psychological Medicine.¹⁴⁷ Likewise the West End Hospital for Nervous Diseases, which had 76 beds, a staff of six physicians, three surgeons, and ‘a large number of psychiatrists and psychotherapist, as well as medical officers of special departments’ was overwhelmed.¹⁴⁸ In addition, the

¹⁴⁵ Ibid; see also Gordon Holmes, *The National Hospital, Queen Square* (Edinburgh and London: E&Livingston, 1954).

¹⁴⁶ Ibid; also see, Anthony Feiling, *A History of the Maida Vale Hospital for Nervous Diseases*, (London: Butterworth & Co. 1958).

¹⁴⁷ Ibid.

¹⁴⁸ Ibid.

Maudsley Hospital near Denmark Hill catered to some neurological cases, although it was, in Brain's words, 'primarily a psychiatric hospital'.¹⁴⁹

Outside of the specialist hospitals, Brain noted, were the London County Council (LCC) Hospitals, into which a vast number of 'acute and chronic neurological cases found their way'.¹⁵⁰ These were sometimes seen by (according to one memorandum) Francis Walshe, Charles Symonds, Samuel Alexander Kinnier Wilson, James Purdon Martin (1893-1984), Macdonald Critchley, Edward Mapother (1898-1968), [Thomas] Grainger Stewart (1877-1957), and Cecil Worster Drought.¹⁵¹

Russell Brain's reaction to the circumstances of hospitals under the LCC was sheer disgust:

The L.C.C. arrangements were wasteful of time and clinical material. Since the Medical Superintendent was left to decide which neurologist on the panel of consultants he would

¹⁴⁹ Ibid.

¹⁵⁰ ARCP, Russell Brain Papers, MS 3226/99.3, W. Russell Brain, "The Organisation of Neurology in London After the War", [undated – c1945-1952].

¹⁵¹ NA, MH 52/91, Frederick Menzies, Consultants employed at General and Special Hospital, 1932, p. 18, London Medical Services, Appointments of Consultants and Specialists; When Frederick Menzies, the Medical Officer of Health for the London County Council, wrote a 1933 report on the Appointment of Specialists in the LCC Hospitals, he suggested each hospital acquire a: "gynaecologist; ophthalmic surgeon; ear, nose and throat surgeon; orthopaedic surgeon; dermatologist; paediatrist; urologist; radiologist; obstetrician; tuberculosis officer." As for neurologists, Menzies thought them desirable, "but as the amount of time for which he would be required is difficult to estimate, I suggest a panel of neurologists should be formed and their services should be utilised as required, and that they should be paid a fee of £2.12s.6d. per session." Frederick Menzies, Committee Report by the Medical Officer of Health [1 February 1933] NA, MH 52/91 London Medical Services, Appointments of Consultants and Specialists.

summon, Dr. A. might be called to St Charles Hospital, Notting Hill at the same time that Dr B was summoned to St Mary Abbots Hospital, Kensington, a mile away, while Dr C on the same day would receive calls to the Western Fever.¹⁵²

The situation, in Brain's view, was much the same under other Councils and with the mental hospitals and mental deficiency institutions. His larger point was that the number of beds allocated for neurological cases (even in London) was ridiculously small; so, too, were the numbers of physicians practicing in neurology. There were also institutional ambiguities about whether the appointments of the physicians were nervous, neurological, psychiatric, or (later) neuropsychiatric.

Analysing Neurology's Process of Institutionalisation

The situation in the other London teaching hospitals was similar to that described by Brain.¹⁵³ The problem neurological practice faced was definitional. Moreover, it was not clear to the general consultants working within those hospitals why it was necessary for neurology to be independent from medicine. Centralisation of nervous patients, one author remarked in 1922, created the problem that 'more than one-half of the persons who seek relief at the neurological out-patient department of a general hospital are suffering from functional as opposed to organic disease.' The solution was deemed to be, 'the appointment at each of the large hospitals of a resident medical officer for the

¹⁵² ARCP, Russell Brain Papers, W. Russell Brain, "The Organisation of Neurology in London After the War", [undated – c1945-1952], MS 3226/99.3.

¹⁵³ See Appendix C, charts C13-C18 for relevant material on career paths, places of work, and administrative positions of 100 twentieth-century physicians active in the Association of British Neurologists.

department of nervous diseases.’¹⁵⁴ This resolution was somewhat naïve, because few large hospitals had departments for patients with nervous diseases before 1930.¹⁵⁵

England

The first department of neurology founded in Britain was at St. Mary’s Hospital.¹⁵⁶ The Electricity Department was founded in 1881. Subsequently, its 1907 transformation into a neurological department by Wilfred Harris (1869-1960) has been seen as a watershed for neurology, because it began neurology’s movement out of special hospitals and into general hospitals.¹⁵⁷ Harris is thus regarded as a pioneering specialist who converted a rehabilitative service for a general medical department into a respectable department of neurology.¹⁵⁸ However, why and how he did this remains unclear.¹⁵⁹

More typical of early institutional developments was the 1912 appointment of Herbert Campbell Thomson (1870-1940) to a special department for ‘Diseases of the Nervous System’ at the Middlesex Hospital. Thomson explained in his history of the hospital that his appointment as physician and lecturer in nervous diseases had occurred because of a

¹⁵⁴ “The Scope of Neurology in Hospital Practice” *JNP*, Vol. 3, No. 10 (1922), p. 168.

¹⁵⁵ See Appendix C, Table C4 and Chart C15 for more information about careers.

¹⁵⁶ John Senior has shown the early connections between Armand de Wattville’s Electricity Department at St Mary’s Hospital and British neurology. John Senior, “Meteorological Awakenings”, in Eileen Magnello and Anne Hardy ed. *The Road to Medical Statistics* (Amsterdam and New York: Rodopi, 2002), pp. 77-93.

¹⁵⁷ *St Mary’s Hospital, a London Family of Six Hospitals a Medical School and an Institute of Research* (Newman Neame Limited, London 1965), p. 34.

¹⁵⁸ E A Heaman, *St Mary’s: The History of a London Teaching Hospital* (Montreal, Kingston, London, and Ithaca: Liverpool University Press and McGill Queen’s University Press, 2003), p. 108.

¹⁵⁹ Eric Nieman, “Wilfred Harris (1869-1960): pioneer of neurology at St. Mary’s Hospital” *St Mary’s Gazette* Vol. 104, No. 2 (1998), p. 733.

demand for neurological teaching by undergraduates. Apart from the re-categorization of his clients as ‘nerve patients’, his initial appointment as Physician-to-Outpatients to the Hospital did not change his routine occupational arrangements. The hospital did not create an in-patient service but only recognised officially as specialist, his services in an outpatient clinic he was providing already. Aside from new teaching responsibilities, the only advantage the position provided him was the ability to justify his focus on neurological referrals.¹⁶⁰ Douglas McAlpine (1890-1981) later replaced Campbell Thomason in 1926, and convinced his father, the industrialist Sir Robert McAlpine (1847-1934), to endow twenty-four beds to form an in-patient neurological department at the Middlesex Hospital in 1930.¹⁶¹

Positions like those held by Harris, Thompson and McAlpine were conceived broadly, and it would be most accurate to describe them as appointments in nervous diseases, *thus also encompassing mental diseases*. William Johnson’s (1885-1949) experiences in Arthur Hurst’s (1879-1944) outpatient neurological clinic at Guy’s Hospital were typical of this type of appointment. Johnson had worked with the physician Gordon Holmes in a head-injuries clinic in France during the First World War (see Chapter 4), and Guy’s Hospital recruited him in 1917. Hurst, though remembered as a gastroenterologist, required a Senior Registrar with a talent for treating neurotic patients to help treat Hurst’s psychoneurotic cases at Seale Hayne Asylum in Devon. Johnson’s practical knowledge of the psychoneuroses meant that he worked with both cases of mental and nervous

¹⁶⁰ Thomson, *The Story of the Middlesex Hospital Medical School* (John Murray; London, 1935), pp. 102, 132-133.

¹⁶¹ “Douglas McAlpine, M.D., Glasg., F.R.C.P.,” *The Lancet*, 28 February 1981, p. 510.

diseases. Johnson, like his mentor Hurst, never felt comfortable claiming specialist status. An author later remembered Johnson as never being, ‘an exclusive specialist, and he remained one of the lessening band of general physicians, at home in all aspects of medicine and with wide practical interests.’¹⁶²

Guy’s Hospital appointed Johnson’s younger colleague, Charles Symonds, Assistant Physician in Nervous Diseases in 1920. The origins of this appointment are slightly confusing. One scholar noted that between 1908 and 1913 a committee at the hospital had reviewed the entire history of specialist departments in order to recommend future developments of new specialties. Some physicians – who they were is unknown – on this committee argued against the teaching of undergraduates by specialists, because it would bog elementary medical teaching in a swamp of details. Students, they argued, would leave medical school insufficiently prepared for general practice if their course work focused on specialties only.¹⁶³ In contrast, others – again unknown – on the committee argued that for the hospital to continue its proud tradition of contributing to the progress of medicine, specialist research would have to become requisite.¹⁶⁴ They felt divisions of medicine were necessary for the advancement of science, while the traditionalists feared this was eroding the very point of the teaching hospitals.

¹⁶² “William Johnson M.C., M.D. Lond., F.R.C.P.” *The Lancet*, 2 April 1949, p. 589.

¹⁶³ H9/GY/A89/3 Guy’s Hospital: Memorandum by Dr. Shaw Upon Special Departments, 1913 London Metropolitan Archives.

¹⁶⁴ H. C. Cameron, *Mr Guy’s Hospital, 1726-1948*, (Longmans, Green and Co: London, New York and Toronto, 1954), pp. 359-360.

The compromise these parties reached eventually benefited surgical specialties more than medical ones, because the Guy's committee deemed that surgeons required complicated instruments. 'In surgical practice it seems that the most important criterion of the necessity for the institution of special department is the need for peculiar dexterity in particular operations, or in the manipulation of special instruments.'¹⁶⁵ Medical specialties like neurology, conversely, did not require difficult instruments and were therefore not to be developed so quickly. Although as early as 1908 a Report at Guy's advised the immediate creation of a Department on Diseases of the Nervous System, it stated confusingly that 'the Physicians on the Committee do not feel...convinced of the necessity of a pure Specialism in Dermatology, Neurology, and Paediatrics.'¹⁶⁶ For the time being fulltime Assistant Physicians would staff new specialist departments, and when a Consulting Physician retired, these Assistant Physicians would have to decide between keeping charge of a specialised department or applying to become a Consulting Physician with general responsibilities.¹⁶⁷ Charles Symonds, who was the first physician appointed to the Guy's Department of Nervous Diseases, probably made his decision to keep the title "Physician of Nervous Diseases" for many complicated reasons. Yet, probably foremost among these, was this institutional history of his appointment.¹⁶⁸

¹⁶⁵ H9/GY/A89/2 Guy's Hospital: Continuation of Previous Memorandum by the Dean of Specialism, 1911; London Metropolitan Archives.

¹⁶⁶ H9/GY/A89/1 Guy's Hospital: Report of the Committee on Specialisms in Medicine and Surgery, 1908; London Metropolitan Archives.

¹⁶⁷ Cameron, *Mr Guy's Hospital, 1726-1948*, pp. 359-360.

¹⁶⁸ "Charles Putnam Symonds", *The Lancet*, 23 and 30 December 1978, 1389-1390; Ian Mackenzie, "Symonds, Sir Charles Putnam (1890-1978)" *Oxford Dictionary of National Biography*, Oxford University Press, 2004.

Stories of institutional debates, acrimony, and compromises similar to Symonds' story abound in the development of neurology in London. Francis Fraser (1885-1964), even as he noted Cecil Hinds Howell had begun a consultative neurologic clinic for outpatients, nonetheless described a hopeless situation for neurology at St. Bartholomew's Hospital in a 1932 letter to his friend at the Rockefeller Foundation, Alan Gregg (1880-1957). 'The plans for a neurological department failed to mature last year and will fail again this year...the formation of new special departments does not meet with approval. It is feared that such special departments must in the end mean more specialised instruction for undergraduates with further cramping of the curriculum.'¹⁶⁹ This, as I noted previously, was a typical complaint against medical specialization, but it was also a sign of an on-going transition between medical cultures.

Despite difficulties like these, hospitals made numerous neurological appointments in London just following the War. For example, King's College Hospital appointed Samuel Alexander Kinnier Wilson as Assistant Neurologist in 1919.¹⁷⁰ University College Hospital appointed Francis Walshe head of a 'newly established neurological department' in 1920.¹⁷¹ In 1923, Anthony Feiling (1885-1975) established an open neurological teaching clinic at St George's Hospital in London.¹⁷²

¹⁶⁹ RAC Francis Fraser to Alan Gregg, 6 June 1932, RG 1.1.folder 265, box 20, series 401.

¹⁷⁰ S. A. Kinnier Wilson, M.D., D.Sc. Edin., F.R.C.P. Lond., *The Lancet*, 22 May 1937, pp. 1253-1254.

¹⁷¹ Transcript, Francis Walshe, "Pride and Prejudice: The Case for specialism in Medicine," *The University College Hospital Magazine*, Vol. XLI, No. 2 [undated] Folder B1, Francis Walshe Papers.

¹⁷² "A. Feiling, B.A., M.D., F.R.C.P." *BMJ* (June 1975), p. 621.

Stories of struggle to found departments of neurology or nervous diseases abound for the provinces as well. In 1927, the Royal Victoria Infirmary in Newcastle appointed George Hall (1879-1955) because of his interest in neurology.¹⁷³ In 1934, the General Infirmary at Leeds considered establishing a number of specialist departments, and in 1937 the neurologist Hugh Garland (1903-1967) was appointed as an Assistant Physician with an interest in Nervous Diseases.¹⁷⁴ The hospital established a neurological department there in 1947.¹⁷⁵ Garland was lucky in that he eventually worked in a neurological department. In contrast, Philip Cloake (1890-1969), the Professor of Medicine at Birmingham, and Arthur Stanley Barnes (1875-1955), Dean of the Faculty of Medicine, struggled throughout the interwar period to establish a Department of Neurology. Barnes, unsuccessful in his endeavours, retired in 1941, while Cloake persevered and attempted to create a tri-partite division in the medical school encompassing neurology, neurosurgery, and neuropsychiatry. Cloake's efforts failed too, although the medical school gave him an honorary position as Professor of Neurology when he retired from his medical professorship in 1946.¹⁷⁶ The Burden Neurological Institute was founded in Bristol in 1938.¹⁷⁷ Outside London, it was the most significant clinical research centre, but it is noteworthy that it embraced neuropsychiatric approaches.¹⁷⁸

¹⁷³ "George Hall, C.M.G., M.D. London., B.Sc. Durh., F.R.C.P., J.P." *The Lancet* (1955), p. 210.

¹⁷⁴ "H.G. Garland, T.D., M.D., F.R.C.P." *BMJ* (November 1967), p. 300.

¹⁷⁵ S. T. Anning, *The General Infirmary at Leeds Volume II The Second Hundred Years, 1869-1965* (Edinburgh and London: E&S Livingston Ltd, 1966).

¹⁷⁶ University of Birmingham, Special Collections Department, Report of the Committee appointed to consider matters connected with the establishment of the Department of Neurology, 1947.

¹⁷⁷ NA FD 1/1426 Minutes of the Burden Neurological Clinic, 16 December 1938.

¹⁷⁸ Ray Cooper, *The Burden: Fifty Years of Clinical and Experimental Neuroscience at the Burden Neurological Institute*, (Bristol: White Tree Books, 1989).

Scotland

These circumstances were true for Scotland too. The Victorian Infirmary in Glasgow appointed a physician in nervous diseases in 1914.¹⁷⁹ In contrast, the Western Infirmary in Glasgow appointed its first neurologist in 1941.¹⁸⁰ Aberdeen did not have a neurological department until after the Second World War.¹⁸¹ Edinburgh University and the Royal Infirmary were similarly conservative establishments. In an enclosure sent to Harvey Cushing, the neurosurgeon Norman Dott (1892-1973), outlining plans for a never-realised neurological and neurosurgical centre, noted 'neurology in the wide sense of the term does not occupy quite the definitely recognised status of the special subject that it does in most American and many Continental Schools.'¹⁸² Edwin Bramwell, continuing in the generalist tradition of his father, was appointed Moncrieff-Arnott Professor of Medicine.¹⁸³ Bramwell did identify himself primarily with neurology, though he practiced as a general physician. His retirement was recognised by the creation

¹⁷⁹ Ian Murray, *The Victorian Infirmary of Glasgow, History of a Voluntary Hospital, 1890- 1948* (C. L. Wright Limited, 1967), p. 65.

¹⁸⁰ Loudon MacQueen and Archibald B. Kerr, *The Western Infirmary, 1874-1974: A century of Service to Glasgow* (John Horn Limited: Glasgow and London, 1974), p. 137.

¹⁸¹ Iain Levack and Hugh Dudley, *Aberdeen Royal Infirmary: The People's Hospital of the North-East* (London, Philadelphia, Toronto Sydney, Tokyo: Bailliere Tindall, 1992), pp. 154-157.

¹⁸² Enclosure, 1931, Dott. Norman M. 1924-1938, The Harvey Williams Cushing Papers in the Yale University Library. Manuscripts and Archives, Yale University Library. Microfilms Series I, Box 24, 448, Microfilm Reel 21; a unit was eventually established along different lines: Martin Eastwood and Anne Jenkinson, *A History of the Western General Hospital: Craighleith Poorhouse, Military Hospital, and Modern Teaching Hospital* (Edinburgh: John Donald Publishers, Ltd, 1995), p. 171.

¹⁸³ [Private Collection], Edwin Bramwell Curriculum Vitae.

of a Lectureship in Neurology at Edinburgh to which his former Registrar, William Ritchie Russell (1903-1980) was appointed in 1938.¹⁸⁴

Wales

It is clear that there was little exclusive neurological practice in Wales throughout the interwar period until the 1960s – a fact surely reflecting Wales’ poorer economic circumstances than resistance to medical specialization. A 1948 government study of specialist services in Wales noted the existence of minimal neurological services at Cardiff Royal Infirmary, Swansea General Hospital, and Wrexham Emergency Hospital.¹⁸⁵ Even after the National Health Service was established the number of house calls made by Welsh neurologists in 1953 (there were only three neurologists for all of Wales) was found to be 173 for the year.¹⁸⁶ This was hardly a sign of Welsh resilience to nervous diseases, and it reflected the substantial role general physicians had in treating neurological patients throughout the country. Indeed, even in 1960, general physicians almost exclusively saw patients suffering from neurological illnesses throughout the United Kingdom, and it was only the more rare and interesting cases that they referred to consultant neurologists.¹⁸⁷

¹⁸⁴ “Russell, William Ritchie” *Munk’s Roll* pp. 514-515; Oxford University, later appointed Ritchie Russell Lecturer in Neurology in 1949, and he eventually held the first Chair of Clinical Neurology at the University, which was established in 1966. “Dr Ritchie Russell” *Times* (London) 11 December 1980, p. 16.

¹⁸⁵ NA MH 96/1797 Welsh Regional Hospital Board, 1948-1957.

¹⁸⁶ NA MH 96/1797 Welsh Regional Hospital Board, 1948-1957. By contrast, there were 2,519 domiciliary visits by neurologists in 1962 throughout the entire United Kingdom.

¹⁸⁷ Denis Brinton, “President’s Address: The Development of Neurological Services under the NHS” *PRSM*, Vol. 53, No. 261 (1960), p. 263. See survey data in appendices.

The Paradoxical Locations of Practice: A Final Analysis

These grey areas in practice juxtaposed against a competing narrative of fragmented institutional developments reveals accidental convergences between individuals constantly producing, and reproducing meaning and legitimacy in their work. The formation of a commonly accepted definition throughout the period covered in this chapter occurred in several ways: It happened in the producing and disseminating of knowledge, the educating of students, the curing of patients, the writing of books and articles, the creating of societies and journals, and the building of institutions. What is fascinating about these practices is that they were often stimulated and organised as much by external agents, as they were by the physicians involved. Thus, as will be shown in future chapters, the defining of neurology occurred because of actions (and inactions) of government ministries and the Medical Research Council. Yet, between 1880 and 1960, physicians involved in neurology were given great authority over the status and organisation of their specialty, and thus a balance must be found among exploring the roles of individuals, patrons, institutions, and the state in the defining of neurology. Often, and confusingly, that defining occurred through the making of retrospective historical accounts. These constructed a history that solidified neurology's past definitions, while ignoring its present ambiguities. What emerges is a fascinating paradox.

The Department of Neurology in the London Hospital Medical College captures neurology's paradoxical location in three ways.¹⁸⁸ Before describing the paradox's specificities, I should note that the paradox occurred because of a lack of state recognition for neurology, the lack of both local institutional recognition and a unified definition among neurology's practitioners. In his retrospective musings about neurology at The London Hospital, Russell Brain recorded in 1964:

I think it is possible to distinguish three threads of continuity in the London Hospital tradition. From Jackson, through Head to his collaborators, there is an approach to neurology in terms of physiology combined with the recognition that only the study of disease in man can illuminate human physiology. Closely linked with this is the dynamic and holistic attitude, also springing from Jackson, which is not content to explain the behaviour of the whole in terms of the parts but claims that even the most fragmentary reactions are influenced by the totality. The third continuing tradition has been the close link between neurology and general medicine.¹⁸⁹

Neurology was physiological, holistic, and tied to general medicine. More interestingly, Brain found historical justifications for these ambiguities, which he thought were particularly modern. He remarked on:

...the progressive narrowing of a specialization in the last hundred years from the catholicity of Johnathan Hutchinson, who made no clear distinctions between surgery,

¹⁸⁸ For a long history of neurology at the London see: Russell Brain, "The Neurological Tradition of the London Hospital or The Importance of Being Thirty" *The Lancet*, (1959), pp. 575-581.

¹⁸⁹ W Russell Brain, *Doctors Past and Present* (London: Pitman Medical Publishing, 1964), pp. 125-126.

medicine, and half a dozen specialties, as we should now call them, to a Riddoch or a Cairns [a neurologist and a neurosurgeon respectively] practising in virtually a single subject. But from Jackson onwards neurologists to 'the London' have remained in some measure general physicians, and the link between neurology and pathology has also been close. Here, I think, by staying in the same place we find ourselves today in advance of the times. As medical knowledge expands, we learn not merely more facts but more relations between facts, and discover that every specialist needs to know more work in an increasing number of fields. This looks frightening at the moment because we have been brought up on old-fashioned lines, and have not developed the techniques for synthesising, teaching, and learning the new ideas we shall need. Whether we like it or not, this will involve a revolution in medical education. It will also mean that though we shall still need specialties and special hospitals, they will be specialties with a closer relation to the rest of medicine than anything we have known since Jonathan Hutchinson's day.¹⁹⁰

Much could be said about this passage: There are hints here of aristocratic traditionalism and generalism. Here was a disavowal of the ideals of medical specialization matched by claims that neurologists were modern because they were generalist specialists. Brain identified specialist practice as harmful, and then defended generalism as more modern than specialization. His retrospective remarks contrast with another only slightly earlier picture of neurology at The London Hospital.

The organisation of the Department of Neurology at The London Hospital was described in the 1944 Goodenough Report as exemplary of specialist organisation. The

¹⁹⁰ My emphasis. Ibid, 125.

Goodenough Report (Report of the Inter-Departmental Committee on Medical Schools) was a survey of British medicine, which Fraser argued was the turning point for medical specialization in Britain.¹⁹¹ Moreover, the Report based its recommendations for specialties upon slight modifications of the model offered by neurology at the London Hospital.¹⁹² Such a specific mention of neurology at The London Hospital, we might imagine, would have led to further discussions in the Report about provision for neurological services, research, and education. Yet, where the Report embarked on a lengthy discussion of specialties like social medicine, child health, psychiatry, obstetrics and gynaecology, reference to neurology was completely absent. The tenth chapter of the Report, for example, considered medical training in the specialties including: pharmacology, infectious diseases, tuberculosis, diseases of the skin, venereal diseases, forensic medicine, radiology, rehabilitation, surgery, diseases of the ear, nose, and throat, diseases of the eye, anaesthetics, and dental health.¹⁹³ There was no mention of neurology. In fact, the only mention of neurology in the Report's three hundred pages is the one passage in which it described the department of neurology at The London Hospital as exemplary among specialist departments.

It was mainly Walter Russell Brain, Head of the Neurological Department at The London Hospital, who sought to change this paradox.¹⁹⁴ As will be explained in Chapter 7, he and

¹⁹¹ *Report of the Inter-Departmental Committee on Medical Schools*. Ministry of Health and Department of Health for Scotland (London: HMSO, 1944); Francis Fraser, "The Rise of Specialism and Special Hospitals", p. 182.

¹⁹² *Ibid.*, p. 149.

¹⁹³ *Ibid.*, pp. 156-166.

¹⁹⁴ Russell Brain, "The Future of Clinical Neurology, Address in Homage to Ramon y Cajal," *The Lancet* (1953), pp. 1109-1111.

the Association of British Neurologists urged the then President of the Royal College of Physicians, Lord Moran (1892-1977), to form a Committee on Neurology in 1944. When Brain became President of the College, he charged this Committee to consider neurology's status in the 1950s. It is worth contemplating why these actions came from a neurologist, who had never trained or worked at the National Hospital, Queen Square.¹⁹⁵ Perhaps it took an outsider from the periphery: a man of odd credentials, appreciations and perceptions, a Quaker and conscientious objector, to identify neurology's problems.¹⁹⁶ Perhaps he could identify and articulate better than most the fact that what was not said in neurology, was what was being done.

Conclusion

This chapter has attempted to set out a general picture of neurological practices in the context of British medicine between 1880 and 1960. The aim has been to show first why it is tempting to exaggerate neurology's status as an autonomous medical specialty. Throughout this period, general physicians maintained interests in neurology, and some did become more restricted in their interests by the close of the interwar period. If the clinical specialty seems in hindsight to have had extensive intellectual foundations in the past, it nonetheless clearly had little institutional presence throughout much of the twentieth century. The interwar emergence of departments, outpatient clinics, and inpatient services, as well as professorships and lectureships in the subject, does however

¹⁹⁵ George W Pickering, "Walter Russell Brain First Baron Brain of Eynsham. 1895-1966," *Biographical Memoirs of Fellows of the Royal Society*, 14, (Nov., 1968), pp. 61-82.

¹⁹⁶ On his oddities and values see: W. Russell Brain, "Encounters with Winston Churchill with an Introduction by Michael Brain" *Mhist*, Vol. 44 (2000), pp. 3-20.

imply an increasing awareness of neurological knowledge. The following chapters highlight the idiomatic practices of physicians interested in the nervous system, and show how as the practices of medicine changed, the institutions representing those individuals and their interests changed as well. The first institution involved in the discussion is the Neurological Society of the United Kingdom. I consider its origins and subsequent history in detail in the next chapter.

CHAPTER 3

Continuities in Practice: Medical and Specialist Societies in Britain

‘The green light.’¹

Introduction

Given that epilepsy and paralysis are neurological concerns now, some have counted the 1859 formation of the National Hospital for Epilepsy and Paralysis in Queen Square as marking the beginning of British neurology.² An argument can be made against this view: Though the new hospital centralized patients suffering from these diseases, they continued to be placed in asylums as well, and their medical conditions were not viewed necessarily as neurological. Since the National Hospital, in contrast to British asylums, provided stigma-free treatment to patients with nervous conditions, its methods were divergent from moral therapy, a method then used commonly in the treatment of insane or borderline patients.³ The National Hospital was a refuge for patients whose social status was ambiguous.⁴ In spite of its institutional reputation in treating epilepsy and

¹ In popular idiom, ‘the green light’ refers to permission to begin something or to start a new project. It derives from early twentieth century signal lights that were placed at the intersection of rail networks.

² See, for example, Macdonald Critchley, “Hughlings Jackson, the Man; and the Early Days of the National Hospital” *PRSM* 53 (1960), pp. 613-618; on general care is made in Anne Hardy, “Poliomyelitis and the Neurologists: The View from England, 1896-1966” *BHM*, Vol. 71, No. 2 (1997), pp. 249-272 and footnote 12; for the initial minutes of the hospitals early years see: QS1.859/6G McMenemy Minute books, GC/83/13 WL; for the letters by the Chandler Sisters regarding the formation of the hospital, see the archives of the Rockefeller Medical Library.

³ Oppenheim, *Shattered Nerves*, on moral management see pp. 293-318, on the National Hospital and for a discussion of practice there see, pp. 30-31 and 120.

⁴ Francis Fraser, “The Rise of Specialism and Special Hospitals”, p. 178; Benjamin White, *Stanley Cobb: A Builder of the Modern Neurosciences*, (Boston: University Press, 1984), p. 104.

paralysis, the hospital did not necessarily represent the creation of a specialist paradigm of clinical neurology in medicine. Rather, as elucidated in the previous chapter, that paradigm was in a state of invention. It has been argued nonetheless, that physicians like Édouard Brown-Séquard (1817-1894) and John Hughlings Jackson were appointed to the Hospital at a propitious moment in neurology, because the great men introduced order into the inchoate field. Though it may be appropriate to suggest that ‘mild confusion was the order of the day’ for Brown-Séquard and Hughlings Jackson, it was really only many years later (and then mostly in retrospect) that the legacy of these men and clinical neurology became identified exclusively with a tradition that had its origins at the National Hospital.⁵

A more obvious moment of transformation occurred with the formation of the Neurological Society of London in 1886.⁶ Its beginnings corresponded to the establishment of other scientific and clinical specialist societies in British medical culture, and paralleled the appearance of neurological societies in other countries.⁷ Why physicians formed the Neurological Society is unclear, but it is striking that it was similar

⁵ Samuel Greenblatt, “The Major Influences on the Early Life and Work of John Hughlings Jackson” *BHM*, Vol. 39, No. 4 (1965), p. 365.

⁶ Peter Schurr, “Outline of the history of the Section of Neurology of the Royal Society of Medicine”, *JRSM*, Vol. 78, (1985), pp. 146-148.

⁷ John Pickstone, *Medicine and Industrial Society: A history of Hospital development in Manchester and its region: 1752-1947* (Manchester: Manchester University Press, 1985), pp. 184-208. The reasons for this phenomenon remain poorly understood. See: Steve Sturdy and Roger Cooter, “Science, scientific management, and the transformation of medicine in Britain, 1870-1950”, Vol. 36 *History of Science* (1998), pp. 421-446, especially p. 422; On other Neurological Societies, see Christopher Goetz, T A Chmura, and Douglas Lanska, “Part 1: The History of 19th Century Neurology and the American Neurological Association” *Annals of Neurology* Vol. 53, No. S4 (2003), S2-S26.

in customs, rules, and organization to the Ophthalmological Society of the United Kingdom, founded in 1880. In many ways, the correspondence between these two societies was not merely coincidental. Thus, one of my arguments in this Chapter is that although neurology had origins in British psychiatry, institutionally it was also indebted to British ophthalmology.⁸ However, as was argued in the last Chapter, it remains important to remember how embedded these specialist societies were within British medical culture. They shared common political and social structures with earlier and contemporary medical societies, and like many of these functioned mainly to maintain and reproduce practices befitting the values and class structure of the profession.

This Chapter begins with a general analysis of the contexts and practices of British medical and specialist societies in the late-eighteenth and nineteenth century. The point of this is to underscore the continuities between these medical societies, as well as to reveal ways in which the structures and functions of these societies changed over time. Medical societies provide fascinating glimpses into the values and practices of past practitioners. Because of the existence of these bodies, we should view the rise of specialist medical societies as somewhat culturally dialectical. On one hand, specialist societies sought to maintain the values and practices of generalist culture, but on the other, they were instigating simultaneously a radical, divisive change into the unified structure of medicine. Two strategies for this process emerged. One, seen here in the origins and practices of the early years of the Ophthalmological Society of the United Kingdom, was a cumulative effort to assert and legitimate the validity of the specialist

⁸ William Bynum, "The nervous patient in 18th- and 19th- century Britain: the psychiatric origins of British neurology", pp. 115-127.

practitioner in British medical society. It was an unabashed even brazen movement for divisions of labour in medicine. In contrast, the founders of the Neurological Society, adopting the expansive and broad perspective identified in Chapter 2, located neurology within medicine and claimed its broader outlook prevented its members from becoming narrow specialists. Though this argument was paradoxical, the Society's leaders overcame this problem by adopting various ideological positions and constructing an amorphous identity for their members. The result, as the final section of this Chapter reveals, was the Royal Society of Medicine's absorption of the Neurological Society. My argument is that although the Neurological Society owed much to the Ophthalmological Society, its physicians built it upon generalist foundations in order to avoid the pejorative charge that neurology was a narrow subject. This avoidance of specialization laid the foundations for the Society's merger with the Royal Society of Medicine in 1907. Their stated preference for medical generalism, typical of late Victorian and Edwardian consultants, operated as the cultural determinant that shaped British neurology until the First World War.

Contexts of Practice in Medical and Scientific Societies

Before analyzing the Ophthalmological and Neurological Societies, it is worthwhile contemplating the social context of earlier medical and scientific societies, in order to understand how these societies operated and changed throughout the eighteenth and nineteenth centuries. The functional role of these societies has been remarkably stable: they were usually institutions defending the *status quo* and often reluctantly reformist, members preferring to avoid political machinations. They were venues for leisure and

society, obloquy, and places for more subtle contests between local elites seeking personal power, respect, and authority.⁹

The formation of early medical societies paralleled other movements defining and shaping British medicine.¹⁰ R J Morris has pointed out that the eighteenth and early nineteenth centuries were periods in which many charitable Christian voluntary associations established medical care centres for the poor, injured and elderly alike.¹¹ One effect of such voluntary associations was that growing numbers of patients began entering hospitals and this, if only occasionally, prompted the formation of new general or special hospitals.¹² As the number of patients entering hospitals increased, the medical profession began viewing that population as valuable resources for teaching and research.¹³ This increase in patients partly prompted the formation of many medical societies and clubs, especially those based around hospitals, such as, for example, the Guy's Hospital Physical Society founded in 1771 or the Middlesex Hospital Medical Society founded in 1774. Members of early societies like these (and those that came

⁹ James Gray and A M McFarlan, "The Royal Medical Society of Edinburgh" in D'Arcy Power ed. *British Medical Societies* (The Medical Press: London, 1939), pp. 12-19; Steven Shapin, "The Royal Society of Edinburgh: a study of the social context of Hanoverian science" 1971 PhD. diss. University of Pennsylvania.

¹⁰ P W J Bartrip, *Mirror of Medicine: A History of the British Medical Journal* (Clarendon Press; Oxford, 1990), p. 6.

¹¹ R J Morris, 'Clubs, societies, and associations' in F. M. L. Thompson ed. *The Cambridge Social History of Britain 1750-1950, Volume 3 Social Agencies and Institutions* (Cambridge: Cambridge University Press, 1990), p. 404.

¹² Francis Fraser, 'The Rise of Specialism and Special Hospitals', pp. 169-185.

¹³ Able-Smith, *The Hospitals, 1800-1948*, p. 16; This was also the finding of Peter Stanley, *For Fear of Pain, 1790-1850* (Amsterdam and New York: Rodopi, 2003), pp. 140-142, 166-178.

after) were usually younger practitioners and medical students, and were supposed to be ‘gentlemen desirous of improvement in medicine and other sciences nearly allied to it’.¹⁴ Such a statement would be true a century later; however, the more interesting and lasting feature of these early societies was that they were places for leisure as well.

Provincial medical and scientific societies offer more clues to this pursuit of leisure than those located in metropolitan areas. Medical societies began to appear in provincial centres early, and they aided in establishing and legitimising a group of practitioners over other types of local healers.¹⁵ Nevertheless, these societies were venues for middle class society, and were therefore places of community and middle class conversation that built bridges throughout the social strata.¹⁶ This feature of these early, eighteenth century societies, many of which Loudon notes were ephemeral and disappeared without trace, meant that knowledge was being transferred between more than just medical practitioners.¹⁷ This was an aspect later societies would fail to mimic.

The Sheffield Medical-Chirurgical Book Society, founded in 1834, was a circulating book society more similar, it was felt later, to the Sheffield Book Society (a leisure-society founded at the beginning of this century) than it was to the then contemporary

¹⁴ Quoted in William Henry Dobie, “Guy’s Hospital Physical Society” in D’Arcy Power ed. *British Medical Societies*, pp. 20-27.

¹⁵ Loudon, *Medical Care and the General Practitioner, 1750-1850*, ch. 6.

¹⁶ “The Place of Medical Societies in the Doctor’s Life” *The Lancet* (1946), pp. 525-526.

¹⁷ Loudon, *Medical Care and the General Practitioner, 1750-1850*, pp. 108, 279; and see chapter 6 for further discussion on medical societies.

Medical-Chirurgical Society.¹⁸ This society purchased books every year, circulated these amongst members, and at the end of a year, auctioned many of them off so that the proceeds could be spent on acquiring new ones. The Medical-Chirurgical Society's book collection nonetheless grew, and when the Sheffield Medical Society formed in the middle of the nineteenth-century, it amalgamated with the Sheffield Medical Library.¹⁹

When the Sheffield Medical Society formed, apparently around 1859, the structure of leisure in these professional societies had altered. Gone, for example, were references to books of philosophy or philosophical discussions.²⁰ Instead, medical practitioners brought their own papers into public discourse, while pathologists exhibited interesting specimens. The societies became places of 'friendly discourse' and 'agreeable refuge from the daily anxieties of medical practice'.²¹ They were becoming professional environments, in which 'gentlemen' from other occupations became less common participants.

Though these past societies were not equivalent exactly to the professional political organizations that emerged in the late nineteenth or early twentieth century, there was

¹⁸ Simon Snell, *A History of the Medical Societies of Sheffield* (Parking and Bacon; Sheffield: 1890), p. 10.

¹⁹ *Ibid.*, p. 11.

²⁰ William E Hume, "The Medical Societies of Newcastle upon Tyne", Vol. XXV, No. 5 *The Newcastle Medical Journal* (1958), pp. 163-226, see, for example, p. 166; in Newcastle the Philosophical and Medical Society was formed in 1786. In 1798 it became The Medical Book Club, and then in 1800 the Newcastle Medical Society.

²¹ *Ibid.*, p. 24; Willis Elwood and A F Tuxford eds. *Some Manchester Doctors: A biographical collection to mark the 150th anniversary of the Manchester Medical Society 1834-1984* (Manchester Medical Society: Manchester University Press, 1984).

greater continuity in later medical societies with those in the past than might be recognized. Ultimately all were venues for leisure where the enjoyment of food and drink with friends of similar values in a comfortable environment was one underlying reason for coming-together. Newer medical societies had an additional feature, for they were also becoming political engines defending or changing the status of the medical profession. By the time the Nottingham Medico-Chirurgical Society celebrated its centenary (1928), Humphrey Rolleston (1862-1944) reflected on how ‘the uses of a medical society are many; they are clearly educational, for unity, peace, and friendship, and in certain circumstances for combined action in medico-political crises’. Thus, sociability and knowledge production merged with new forms of political lobbying in later societies.²²

Medical and scientific societies in late-nineteenth century Britain inherited and reproduced much from these complex historical, social origins. They imitated each other, while also mimicking the bourgeois characteristics of other local recreational societies. They disseminated knowledge, but also facilitated the coming together of friends. They were places for criticism, distinction, and rebuke, and allowed medical elites to display their talents and erudition. By the mid-nineteenth century, the societies were bringing together an array of the material components of Victorian culture: the room or rooms in which meetings were held were filled with the gadgets, patients, apparatuses, as well as the politics, controversies, and rhetoric of the outside world.

²² Humphry Rolleston, *Centenary of the Nottingham Medico-Chirurgical Society* (The Thoroton Press; Nottingham: 1928).

There was great similarity between these medical and scientific societies and what we might now call specialist societies. Sturdy and Cooter have observed that in Britain, medical specialists were more common in the provinces in the late nineteenth century.²³

Perhaps this is because those areas were *sometimes* hotbeds of dissent, usually religious and political, but maybe reformist.²⁴ Specialist scientific and medical societies were certainly a nineteenth-century phenomenon; yet, it is not so clear that they were specifically for communities of ‘defined’ specialists. The Edinburgh Obstetrical Society, established in 1840, might now be described a specialist medical society, and yet as Jenkinson remarks, this society was ‘something of a special case, since it effectively remained for many years a society open to general practitioners’.²⁵ Other societies made that same claim, and it was one echoed frequently in the Neurological Society of London. The Reading Pathological Society founded in 1841 was no less amorphous in its membership. The Physiological Society was founded in 1876, and the Anatomical Society of Great Britain and Ireland in 1887. Both were broadly biological in focus, but each could have boasted of the many types of medical men who formed its membership. Indeed, in 1888, twenty of the Physiological Society’s ninety members were also members of the Neurological Society of London. The memberships of these societies

²³ Sturdy and Cooter, “Science, Scientific Management, and the Transformation of Medicine in Britain, 1870-1950”. They remark, ‘Specialization was seen as a more acceptable strategy in the provinces, where elite doctors did not have access to the same concentration of wealthy patrons as was available in the metropolis.’ p. 427.

²⁴ John Money, “Science, Technology and Dissent in English Provincial Culture: From Newtonian Transformation to Agnostic Incarnation” in Paul Wood ed. *Science and Dissent in England, 1688-1945* (Ashgate; Hampshire: 2004), pp. 67-112.

²⁵ Jacqueline Jenkinson, “The Role of Medical Societies in the Rise of the Scottish Medical Profession 1730-1939”, *SHM*, Vol. 4, No. 2 (1991), p. 266.

were diverse, and the overlap between memberships significant. Such overlaps existed, for instance, between the Ophthalmological Society of the United Kingdom and the Neurological Society of London, both of which I consider in the following sections.²⁶

Practical Origins: Neurology in the Ophthalmological Society

Other authors have described the psychiatric origins of neurology in the eighteenth and nineteenth century.²⁷ These origins were important, but another significant and less remarked upon origin for neurology scientifically and institutionally can be traced from ophthalmology, especially in the 1880 formation of the Ophthalmological Society of the United Kingdom.²⁸ The formation of this society, scholars have noted, was a fillip for modern medical specialization in Britain.²⁹ The Society published its proceedings in quarterly instalments as the *Transactions of the Ophthalmological Society of the United Kingdom*. Each completed volume of the *Transactions* contained lists of officers and the council, and also listed were the rules for membership and participation in the meetings,

²⁶ See Appendix A, Lists A5-A9 and Charts A1-A4.

²⁷ Bynum, "The nervous patient in 18th- and 19th- century Britain: the psychiatric origins of British neurology", pp. 115-127.

²⁸ George Rosen's essay on specialization promoted this conclusion. 'The significance of the relation between ophthalmology and internal medicine, especially neurology, was recognized very soon. This is evidenced by the following statement of Hughlings Jackson in 1863: 'I write as a physician, and not as an ophthalmologist. I have studied ophthalmic medicine merely as a help to the study of diseases of the Nervous System. I look at the fundus of the eye, in cerebral cases, when there is even slight failure of sight, in order to ascertain the caliber of the retinal vessels, and the supply of blood to the optic disc, as evidenced by their greater coloration.' *The Specialization of Medicine with particular reference to Ophthalmology*, p. 22.

²⁹ Context is provided in: Jenkinson, "The Role of Medical Societies in the Rise of the Scottish Medical Profession 1730-1939"; also see, A. Batty Shaw, "The Oldest Medical Societies in Great Britain" *Mhist* Vol. 12 (1968), pp. 232-244.

and each volume published a complete membership list, including mailing addresses.³⁰ Members received the *Transactions* of the society, and, disseminated in this way, the proceedings of each meeting reached audiences throughout Britain. Communications to the Society could be made as presentations at the meetings, or they could be submitted for peer-reviewed publication.³¹ Because the leadership's agenda for the Society was professional autonomy for ophthalmologic practice, they instantly began asserting a new political role for ophthalmology by publishing reports and offering recommendations on public policy.³²

The publication of the *Transactions* indicated to sceptics of specialization that by the common consent of its members, ophthalmologists intended to buck medical culture's prejudices against specialization. There were no pretensions to medical generalism, although as William Bowman (1816-1892), the Society's founder, patron, and first President noted at its inaugural meeting, the society's membership was diverse. 'I am truly glad to see here to-night several physicians and surgeons who are very competent oculists, though not called by that name, some who have greatly advanced the knowledge of ophthalmology in its more recondite regions....'³³ Far from being an appeal for

³⁰ "Rules", *Transactions of the Ophthalmological Society of the United Kingdom* (hereafter, *Trans.*), Vol. 1, (1880-81), pp. xxvii-xxx.

³¹ "Bye-Laws Concerning Communications", *Trans.*, Vol. 1 (1880-81), p. xxx.

³² "Report of the Committee on Colour Blindness", *Trans.*, Vol. 1. (1882), p. 191; 'The prevention of blindness from ophthalmia neonatorum', *Trans.*, Vol. 4, (1884), pp. 32-35.

³³ William Bowman, "Inaugural Address at the First Meeting of the Society on 23 June 1880", *Trans.*, Vol. 1, (1880-81), pp. 1-5 and specifically p. 4; on Bowman's patronage to the society see: Jonathan Hutchinson, "Introductory Address at the Opening Meeting of the Session 1883-84, October 11th, 1883", *Trans.*, Vol. 4, (1884), pp. 1-13.

medical generalism, Bowman's comments were the skilful anatomical stake-claiming of a medical surveyor who understood, for example, that the visual fields of the eye eventually became the cortical fields of the brain. Bowman was not relinquishing disciplinary space for the sake of conformity, he was defining ophthalmology's plot of land.

If neurology was one of those disciplines Bowman relegated to 'recondite regions', its role from the periphery offered much for ophthalmologists. A 'large part of the total communications received,' he remarked in the Society's second year, had come from physicians with an interest in ophthalmology but not engaged in its practice, especially 'physicians largely concerned with diseases of the nervous system'.³⁴ Indeed such physicians participated frequently in the proceedings of the Society throughout its first decade. John Hughlings Jackson, for example, presented many papers in those early years. In 1881, he presented a paper titled 'On eye symptoms in locomotor ataxia', and another one he had translated from Professor Franciscus Donders (1818-1889) in Utrecht, 'On the relation between the movements of objects and the rotation of the eyes'.³⁵ In 1883, he presented a paper 'On ocular movements with vertigo, produced by pressure on a diseased ear'.³⁶ That same year popular interest within the Society in the neurological study of the eyes led to a special session on 'Eye Symptoms in Diseases of the Spinal

³⁴ William Bowman, "Address by the President at the First Annual Meeting, 6 July 1881", *Trans*, Vol. 1, (1880-81), pp. 228.

³⁵ John Hughlings Jackson, "On the eye symptoms in locomotor ataxy" *Trans*, Vol. 1, (1881-82), pp. 139-154; idem, *Trans*, Vol. 2 (1882), pp. 213-217.

³⁶ John Hughlings Jackson, "On ocular movements, with vertigo, produced by pressure on a diseased ear", *Trans*, Vol. 3, (1883-84), pp. 261-264.

Cord' at which the Professor of Clinical Medicine at University College London, William Gowers, and the physiologist-physician, Seymour Sharkey (1847-1929), presented papers.³⁷ By 1884, the normal schedule of the Society's annual meetings included one on 'Affections of Muscular and Nervous Systems'.³⁸ At these meetings, physicians based mainly at the National Hospital were enthusiastic participants.

The Ophthalmological Society of the United Kingdom enjoyed its greatest involvement of these physicians between the years 1885 and 1889. Indeed Hughlings Jackson's Bowman Lecture on 'Ophthalmology and Diseases of the Nervous System', which was delivered in 1885, offered a positivist defence for medical specialization.³⁹ Later regarded by James Taylor (1859-1946) as a classic instance of Jacksonian writing, he delivered it in early November of 1885.⁴⁰ Then Jackson explicated his ideas about the evolution of the nervous system, and remarked on how pathological conditions demonstrated states of devolution.⁴¹ What is fascinating about this lecture, however, is the way Jackson conflated his comments on the evolution of the nervous system with a broader argument about the evolution of society. There was in his argument a proliferation of analogies between the relationships in the social organization of medicine and the evolutionary

³⁷ "Eye Symptoms in Diseases of the Spinal Cord", *Trans*, (1882-83), pp. 190-228.

³⁸ "XII. Affections of Muscular and Nervous Systems", *Trans*, Vol. 4, (1884), pp. 300-315.

³⁹ J Hughlings Jackson, "Ophthalmology and Diseases of the Nervous System", *Trans*, Vol. 6, (1886), pp. 1-22.

⁴⁰ James Taylor, "The Ophthalmological Observations of Hughlings Jackson and their bearing on Nervous and other Diseases," *Brain* Vol. 38 No. 4, (1915), p. 392.

⁴¹ On Jackson's theories of devolution see, David Steinberg, "What modern neuroscience can learn from Hughlings Jackson" ed. F. Clifford Rose *A Short History of Neurology: the British Contribution, 1660-1910*, (Oxford: Butterworth Heinemann, 1999), pp. 165-177; Oppenheim, *Shattered Nerves*, pp. 274-275.

organization of the nervous system. He argued, for instance, that since the division of labour was a 'universal law' it linked by analogy to Herbert Spencer's (1820-1903) theories of social and cultural evolution.⁴² Jackson joined differentiation, complexity, progressing evolution, definiteness, and integration in the nervous system of organisms – all Spencerian concepts – with his own views about medical specialization and the social structure of medicine. There was, Jackson argued, parallels between the evolution of the nervous system and the evolution of society, and, finally to the evolution of a higher social order he termed the 'body medical'. He wrote, 'Differentiation is well seen in the development of animal organisms, and is seen, too, in the social organism.' He then added, 'It would be very remarkable if there were an exception in the case of one part of the social organism, the body medical, - if in so great a field of work as the medical there did not arise more and more different parts of that field.'⁴³ Indeed the 'body medical' for Jackson was an intricately complex subject; its categories included 'alienist physicians, neurologists, obstetric physicians, ophthalmic surgeons, aural surgeons, dentists, physiologists, chemists, &c.; the specialty of each comes out of, and is a differentiated part of, a wide general knowledge.'⁴⁴ Each specialist made a distinctly different contribution to social evolution and progress. 'Specialists have to justify themselves – to justify their differentiation.' Increases in differentiation, definiteness, integration, and cooperation among these medical species would determine progress in medicine. Douglas Argyll-Robertson (1837-1909), for instance, had justified the specialization of

⁴² Jackson specifically mentioned Herbert Spencer. See his footnote on p. 2; John Hughlings Jackson, "Ophthalmology and Diseases of the Nervous System", *Trans*, Vol. 6, (1886), pp. 1-22.

⁴³ *Ibid.*, p. 1.

⁴⁴ *Ibid.*, pp. 1-2.

ophthalmology by integrating observations about the eye into a paradigm neurologists could use as a 'means of investigation of several important diseases'.⁴⁵ Jackson remarked:

Each different worker, knowing one subject best, and having great integration of different, definite medical knowledge, of necessity cannot have the precise knowledge of other subjects which other different workers have. Division of labour necessitates the co-operation of labourers. The whole of one disease is better understood by bringing to bear on its direct investigation and treatment different workers in different fields.⁴⁶

Jackson then focused on the epilepsies and attempted to show how the body's symptoms before, during, and after episodes showed the various levels of man's evolution. As excessive nervous discharges temporarily terminated higher evolutionary functions, lower levels rose to the surface for observation. Jackson's theory of devolution was similar to embryological arguments, which would shortly become popular. Just as the foetus was supposed to have passed through all of its pre-existing evolutionary morphologies, nervous diseases brought out older evolutionary manifestations. Symptoms were not signs of diseased states only. Inferring normal physiological connections from these symptoms was possible, and they were clues to man's evolutionary history. The result, which was contingent upon the disease, was that lower levels of evolution appeared uninhibited.⁴⁷ For Jackson, however, not only did nervous

⁴⁵ Ibid., p. 2.

⁴⁶ Ibid.

⁴⁷ Ibid., pp. 16-17.

diseases present clues about the evolution of the body and the physiology of the nervous system, they also showed ways in which the medical body should undergo a similar evolution. Neurologists, Jackson argued, were supreme integrationists, because they took the knowledge of the ophthalmic and aural surgeon (medics working at the lowest level of evolution) and then they integrated this knowledge with observations made by alienist physicians on the highest evolutionary structures. Neurologists were focused on the integration of the middle layers with both the higher ‘human’ qualities and the lower ‘animal’ reflexes. ‘Thus the neurologist, by availing himself’ of the knowledge of these different workers ‘may hope to justify his differentiation.’⁴⁸ Neurologists could be specialists; indeed *should be*, to promote progress in medicine.

More polemic than empirical, Jackson’s Bowman Lecture employed organic metaphors commonly used for justifying the specialization of medicine in the late nineteenth and twentieth centuries – Jackson may in fact have created this language for medical specialization.⁴⁹ His remarks, though reified, articulated a broader defence of specialization, the social agenda of the Ophthalmological Society of the United Kingdom. Not only was specialization rational and necessary for progress in medical knowledge, Jackson had also argued that it was a natural process.

⁴⁸ Ibid., p. 22.

⁴⁹ Samuel Greenblatt, “The Major Influences on the Early Life and Works of John Hughlings Jackson”, *BHM*, Vol. 39, No. 4, (1965), pp. 346-376.

Jackson's reliance on Herbert Spencer was more than the application of a theory to the nervous system.⁵⁰ For him, Spencer's theories constructed a universal, cosmic bridge between the nervous body and the social body, and specifically the 'body medical'. The individual's brain and behaviour inextricably linked to society and culture, and in turn, society and culture were a part of nature and the universe. Following Spencer, Jackson believed the organ of the mind subdivided into a heterogeneity of evolutionary layers – each metonymically related to a past of human social history only expressible in evolutionary terms. Moreover, Jackson was adding a further bridge to the social body of medicine. He was arguing that the heterogeneity of the nervous system justified and necessitated a heterogeneous pool of medical practitioners – each group would have a special interest in a given evolutionary layer and consequently would coordinate and correlate their knowledge and practices together. This coordination and correlation would lead invariably to progress in medicine. In historically positivistic terms, Jackson provided a fundamental, theoretical justification for all specialists in medicine, especially for specialists in nervous diseases. Ophthalmologists, aural surgeons, neurologists, and alienists who had hitherto been perceived as outside the folds of general medicine, found with Jackson's views an argument not only locating them within the vast spectrum of medicine, but also making them proponents of heterogeneity, which was according to Spencer, a sign of social and cultural progress. This was a veritable green light for medical specialists.

⁵⁰ On Herbert Spencer see: Mark Francis, "Herbert Spencer and The Mid-Victorian Scientists" *Annual Review of the Australasian Association for the History, Philosophy, and Social Studies of Science*, Vol. 4 (1986), pp. 2-21; David Oldroyd, *Darwinian Impacts: an introduction to the Darwinian Revolution* (Milton Keynes: Open University Press, 1983), pp. 204-211.

Unsurprisingly, Jackson's urge for medical specialization through the creation of divisions of labour mirrored already existing medical expertises, neurology among them. Scarcely three months later, in January of 1886, the Neurological Society of London formed at Jackson's house, where he became its first President.⁵¹ After holding that office for two years, Jackson became President of the Ophthalmological Society, with Thomas Buzzard (1831-1919), his friend and fellow physician with an interest in nervous diseases, as one of his Vice-Presidents.⁵²

It would be folly to attribute the formation of the Neurological Society of London solely to Jackson's arguments in his Bowman Lecture. On the other hand, it is not a stretch to argue it was important, because other noteworthy connections between ophthalmology and neurology existed, and both specialist societies had important similarities. Firstly, there was a shared intellectual interest. Neurology and ophthalmology were somatic subjects, or what George Rosen would have described as specialties derived from organ localism, i.e. the idea that a bodily organ justified a specialty for that organ.⁵³ The former was interested in nerves, while the latter was interested in ocular innervations, function, and diseases. For physicians interested in neurology, the eyes were diagnostic windows into the nervous system and the only outcroppings of the central nervous system they could study in the living subject. Secondly, there was a shared technology. The ophthalmoscope was a device used by both sets of physicians. Physicians noted its diagnostic utility in neurology early, especially in diagnosing syphilitic disorders,

⁵¹ Schurr, "Outline of the history of the Section of Neurology of the Royal Society of Medicine", p. 147.

⁵² "Officers and Council for the Session 1888-89", *Trans*, Vol. 7, (1889).

⁵³ Rosen, *Specialization of Medicine*, p. 3.

ophthalmic or cerebral cancers, and differentiating types of neurological blindness. Clifford Allbutt's (1836-1925) monograph *The Use of the Ophthalmoscope in Diseases of the Nervous System and of the Kidneys and also in certain General Disorders* appeared in 1871 and was remembered as important in the development of neurology.⁵⁴ William Gowers, later to be author of a textbook on nervous diseases, had written in 1879 *A Manual and Atlas of Medical Ophthalmoscopy*.⁵⁵ Hughlings Jackson published a note in *The Lancet* titled, the 'Value of the Ophthalmoscope in the Investigation and Treatment of Diseases of the Brain'.⁵⁶

One further point of comparison exists: Analysis of memberships lists of both societies from 1905 reveals that fifty-one physicians held joint membership in both societies. This was twenty-one percent of the Neurological Society's membership and eleven percent of membership of the Ophthalmological Society. Members holding *joint membership* in both societies formed the active core of the Neurological Society.⁵⁷

Nonetheless, there were significant differences. When the Neurological Society of London formed, it made little effort to create distinctions between neurology and

⁵⁴ Humphrey Davy Rolleston, *The Right Honourable Sir Thomas Clifford Allbutt* (London: Macmillan and Co., ltd, 1929), pp. 56-59.

⁵⁵ William Gowers, *A Manual and Atlas of Medical Ophthalmoscopy* (London: J&A Churchill; 1879).

⁵⁶ John Hughlings Jackson, "Value of the Ophthalmoscope in the Investigation and Treatment of Diseases of the Brain" *The Lancet* (1880), p. 906.

⁵⁷ See Royal Society of Medicine Archive (hereafter RSMA), NS/A/1 Neurological Society Minute Book, 1898-1907, Includes reports, letter regarding amalgamation of medical societies and names and addresses of members, Vol.1, p. 1 (Hereafter NS/A/1 Neurological Society Minute Book, 1898-1907). Also, Appendix A, Tables A1-A3.

medicine. Since it lacked the proselytizing zeal for specialization, which characterized the Ophthalmological Society, there was no attempt to homogenize neurology's community. Indeed, they deemed the diversity of its professional interests (already noted in Chapter 2) as the central strength and challenge of the subject's character.

Medical Practices within the Neurological Society of the United Kingdom

With these origins in mind, it is now possible to explore the practices of the Neurological Society of London, which physicians founded in 1886, and renamed the Neurological Society of the United Kingdom in 1905.⁵⁸ Once again, this analysis reveals ways in which these practitioners incorporated definitional ambiguities institutionally into their practices. Moreover, the ways in which generalist medical culture shaped this Society's cultural and social practices should remain in the foreground. This culture eventually led the Society's membership to vote to join the Royal Society of Medicine.

The first meeting held by the Neurological Society was in January 1886. From a current perspective, this first meeting was an eclectic gathering. The founders of the Society were not only physicians or surgeons but were also scientists and political theorists. Indeed, only retrospectively could we describe most of this Society's members as 'neurologists' or 'psychiatrists'.⁵⁹ The President of the Society was John Hughlings Jackson and the Vice Presidents were Samuel Wilks (1824-1911) and James Crichton-Browne (1840-1938). The first Council was drawn from the London medical elite and included Henry

⁵⁸ Critchley and Critchley, *John Hughlings Jackson*, ch. 18.

⁵⁹ Oppenheim, *Shattered Nerves*.

Charlton Bastian (1837-1915), Sir William Broadbent, John Bucknill (1817-1897), Thomas Buzzard, David Ferrier (1843-1928), Jonathan Hutchinson (1828-1913), George John Romanes (1848-1894), and Edward Albert Sharpey-Shäfer (1850-1935). Francis Galton (1822-1911) was also an original member of the Council. The Secretaries were Alexander Hughes Bennett (1848-1901) and Armond de Watteviles (1846-1925).⁶⁰ Interestingly, the Council immediately elected Herbert Spencer an Honorary Member.

The first council adopted expansive views of the definition of a neurological society: they did not wish their interests to seem restricted to narrow clinical problems and studies. One of its founders recollected in 1908, 'It was decided to establish the Society on no narrow basis, and arranged that the President should represent one year special neurology, another general medicine, another surgery, another psychology, another physiology. Each with special leanings upon the subject of the nervous system.'⁶¹ Nor did the society desire to appear overtly specialist. Thomas Buzzard recalled that the scrupulous aim to avoid publication of the society's proceedings in a journal was 'a protest against a tendency to advertise which some thought was inclined to show itself in Society work.'⁶² The Council might have had the unapologetic specialist agenda of the Ophthalmological Society in mind when they constructed this policy, but there were other candidates as well. Specialists had often used membership in societies, publications in journals, entries in the Medical Directory, and even advertisements in newspapers to

⁶⁰ RSMA, NS/A/1, Minute Book, 1898-1907. Vol.1, p. 1.

⁶¹ RSMA, NS/A/2, Thomas Buzzard to Leonard Guthrie, 29 January 1908.

⁶² Ibid.

alert the public to their practices.⁶³ For the Neurological Society's members, a temporary equilibrium between generalism and specialism was a preferred social posture.

Thus, the Neurological Society intended to be different from other specialist societies. With its elite membership, the Neurological Society could easily have had its transactions published in either *The Lancet* or *The British Medical Journal*, and undoubtedly this would have benefited specialists desiring public attention.⁶⁴ However, at the second organizing meeting held in February of 1886, the council members expressed the opinion 'that this was inadvisable except with special sanction of the council.'⁶⁵ Circumstances, however, changed the following year.

A more appropriate, less self-promotional place for publication of the proceedings of the society was the journal *Brain*, which John Hughlings Jackson, James Crichton-Brown, David Ferrier and John Charles Bucknill had founded in 1878. In 1887 *Brain's* publishers, MacMillan and Company, submitted proposals to the Society suggesting a business affiliation. With its limited circulation, it was felt publishing in *Brain* hardly

⁶³ John Burnham, "The Founding of the Archives of Neurology and Psychiatry; or, What Was Wrong with the Journal of Nervous and Mental Diseases" *Journal of the History of Medicine and Allied Sciences*, Vol. 36 (1981), p. 323.

⁶⁴ Indeed, both the proceedings of the Neurological Society and announcements of special lectures occasionally appeared in *The Lancet* from 1888 until 1905. See for instance: "Neurological Society of London", *The Lancet*, 18 February 1888, pp. 325-326; "Neurological Society: Presidential Address on Heredity in Neurosis", *The Lancet*, 16 January 1897, pp. 178-179; "Neurological Society: The Presidential Address", *The Lancet*, 8 January 1898, p. 16.

⁶⁵ RSMA, NS/A/1, Minutes, Vol.1, p. 5.

qualified as advertisement, and there were financial advantages to the relationship.⁶⁶ Macmillan and Company suggested profits from the publication be split, allowing the Society to subsidise the journal with their portion of the profits.⁶⁷ The advantages were tremendous, because the expense of publishing illustrations, for example, had commonly fallen on the authors' shoulders. Plates were expensive, and subsidy from the journal's profits meant a decrease in costs to the authors.⁶⁸ Terms were eventually agreed, and in 1888 *Brain* became the official organ of the Neurological Society.⁶⁹ Still the council only began publishing the proceedings of the Society in *Brain* in 1894, and its members continued their studious avoidance of advertising specialist practices.⁷⁰

Initially membership in the Society was by invitation only.⁷¹ The original members of the society represented a wide swath of British medicine, science, and philosophy, including notables like Herbert Spencer, Thomas Clifford Allbutt, Walter Gaskell (1847-1914), and Michael Foster (1836-1907).⁷² By 1887, the Society had created an application process where the applicant had to find 'at least three members of the society' willing to 'append

⁶⁶ RSMA, NS/A/1, Minutes, Vol.1, pp. 12a, 12-13.

⁶⁷ RSMA, NS/F/1, Memorandum of Agreement between the Neurological Society and Messrs Macmillan & Co.

⁶⁸ The strain on the society's budget was tremendous. See, for example, RSMA, NS/A/1, Minutes, Vol. 1, p. 27.

⁶⁹ RSMA, NS/A/1, Minutes, Vol.1, p. 13.

⁷⁰ "The Proceedings of the Neurological Society from its foundation to the year 1893", *Brain*, Vol. 17, (1894), pp. 19-24.

⁷¹ RSMA, NS/A/1, Minutes, Vol.1, p. 4. See Appendix A, List A1 for a list of members in 1905.

⁷² The most important example of the philosophical interests of the society appeared in two articles in 1891. Shadworth Hodgson, "The Philosophical Relations of Neurology", *Brain*, Vol. 14, (1891), pp. 1-17; J. S. Bristowe, 'On the Nature and Relations of Mind and Brain', *idem.*, pp. 18-34.

their names' as sponsors on the membership form.⁷³ Once accomplished, this practically ensured membership. Between 1887 and 1907, the Society received over 353 applications. In 1907, the Council also scrutinized two applications submitted by women – Helen Stewart and Mary Sturge – and accepted them grudgingly.⁷⁴ Subsequently, the women saw their membership terminated when the Neurological Society joined with the Royal Society of Medicine because it deemed it 'advisable that the question of election of women members be deferred until when the Neurological Section of the Royal Society of Medicine has had an opportunity of voting upon the matter.'⁷⁵

Membership was not restricted simply to the metropolitan elite. In 1902, 123 members lived in London, while another seventy-three lived elsewhere in England. Ten were from Scotland, five from Wales, and an additional sixteen from other nations.⁷⁶ The Council elected, for example, Adolf Meyer (1866-1950), a psychiatrist in America, to the membership in 1897.⁷⁷ Meyer thought the personal advantage quite large because he received *Brain* for the small cost of the membership, £1.⁷⁸ The Society's membership continually increased. In 1889, there were 133 members. By 1907, the year the Society dissolved, there were 256 (see Figure 1).⁷⁹

⁷³ RSMA, NS/A/1, Minutes, Vol. 1, p. 16.

⁷⁴ RSMA, NS/E/1. (I have not succeeded in locating biographical information for either woman.)

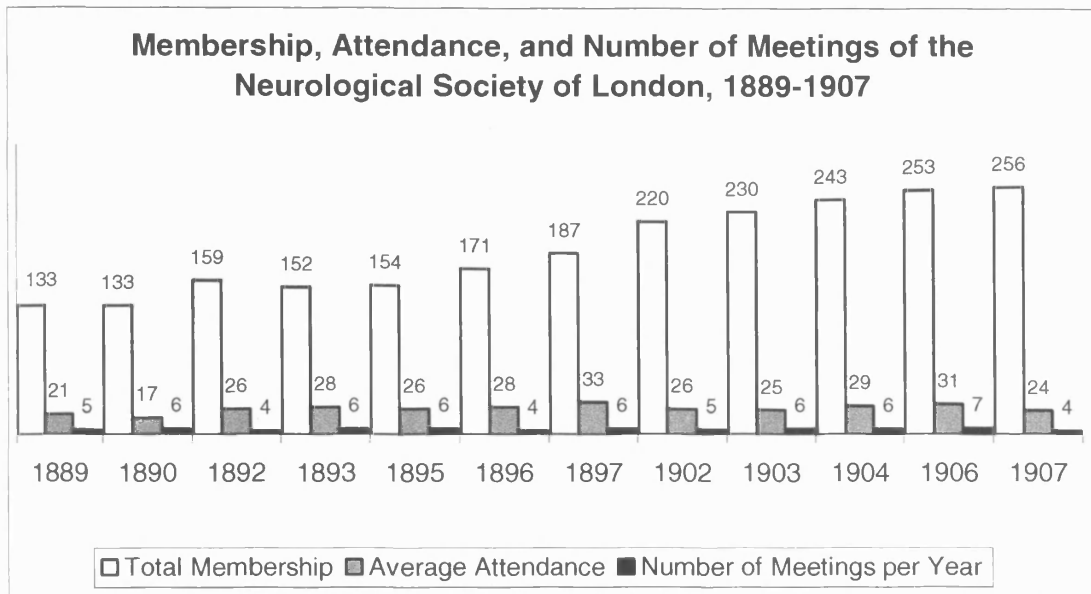
⁷⁵ RSMA Minute Book, 1898-1907. Includes reports, letter re amalgamation of medical societies and names and addresses of members. Vol. 2, Minutes of 111th Meeting, NS/A/2 (Hereafter NS/A/2) No page numbers given.

⁷⁶ RSMA, NS/A/2, Neurological Society of London, Draft Report of Council for 1902, 22 January 1903.

⁷⁷ AMCMA, C E Beevor to Adolf Meyer, 8 June 1897, 11/405/1 Neurological Society of London.

⁷⁸ C E Beevor to Adolf Meyer, 29 September 1897, 11/405/1 Neurological Society of London, AMCMA.

⁷⁹ This data is from the available reports. Data from years earlier than 1889 is not available.

Chart 3.1⁸⁰

Despite representation from the provinces, members attending ordinary meetings were mainly from London.⁸¹ On average, the society held five ordinary meetings per year, each had an average of twenty-six members. The dramatic increase in members from 1886 to 1907, did not translate into proportional increases in attendance at the meetings.

⁸⁰ Information from missing years was not located. Neurological Society of London Report of Council, 17 December, 1889, pp. 1-2; Copy of Treasurer's Balance Sheet for 1890, pp. 47-49; Neurological Society of London (insert page 68) Report of Council, 19 January, 1893; Neurological Society of London (insert page 71) Report of Council, 25 January 1894; Neurological Society of London (insert page 80) Report of Council, January 25th, 1895; Neurological Society of London Report of Council, 14 January 1897; Neurological Society of London Report of Council (undated, but c.1898); NS/B/2 Neurological Society of London, Report of Council, 6 February 1902, pp. 1-6; NS/B/2 Neurological Society of London, Draft Report of Council for 1902, January 22 1903, pp. 1-3; NS/B/2 Neurological Society of United Kingdom, Report of the Council for 1903, 4 February 1904, pp. 1-3; Neurological Society of the United Kingdom, Report of the Council for 1905, 1 February 1906, pp. 1-4; NS/B/2 Neurological Society of the United Kingdom, Report of the Council for 1906, 21 February 1907, pp. 1-4.

⁸¹ RSMA, NS/D/1, Neurological Society Attendance Book. There were obvious exceptions to this rule. Members from Cambridge and Oxford seemed to have attended frequently.

The Attendance Book of the Society records locations and minutes that reveal the broad range of topics and concerns, and how these determined the various locations of meetings. The most popular venues were the National Hospital, Queen Square and the Physiological Laboratory, University College London.⁸² Clinical demonstrations were typically held at the National, whereas, physiological meetings occurred at the Laboratory. In the spring of 1886, for example, the minutes of the society recorded that the council decided to hold an ordinary meeting at the Physiological Laboratories ‘devoted to the physiological relations of neurology’ with E A Sharpey-Shäfer and Victor Horsley demonstrating, ‘their most recent researches on the subject of cerebral localization’.⁸³

Other meetings on functional nervous diseases occurred at the Paddington Infirmary, physicians at St Mary’s Hospital demonstrated electrical treatments of nervous diseases, while general meetings commonly occurred in the rooms of the Medical Society of London. George Savage, a member of the council in 1886 and its President in 1897, was asked to arrange a meeting at Bethlem Royal Hospital in the Autumn of that year, provided subjects were available for ‘demonstrations and discussions’ of the mental aspects of nervous diseases.⁸⁴ In 1899, the anthropologist and psychologist William Rivers (1864-1922) invited the Society to Cambridge for a special lecture on the results

⁸² RSMA, NS/D/1, Neurological Society Attendance Book, 1886-1898.

⁸³ RSMA, NS/A/1, Minutes Vol. 1, p. 6.

⁸⁴ RSMA, NS/A/1, Minutes Vol. 1, p. 8.

of his 'recent investigation at the Torres Straits'.⁸⁵ Such a various and expansive selection of topics was the Council's standard.

Less frequent were meetings intended to improve communication with members in the provinces. In 1903, to celebrate the change of its name to the Neurological Society of the United Kingdom, the University of Edinburgh sponsored an extra-metropolitan meeting.⁸⁶ Professor E A Sharpey-Schäfer, formerly in London but then in Edinburgh, invited the society to Scotland with the promise:

We can arrange those who come a very hearty welcome and I have not doubt that most of those who do us the honour of visiting our ancient city will be asked to accept private hospitality. The President of the Royal College of Physicians has promised his active cooperation and I am sure I can speak for the medical side of the University that every facility will be afforded the members to see whatever is most interesting in the neurological way.⁸⁷

Nonetheless, travel to Edinburgh was apparently no trivial matter, and only thirty-four members of the Society attended the meeting. Most were from London.⁸⁸ Thus, the first provincial meeting of the Neurological Society of the United Kingdom resembled more a

⁸⁵ RSMA, NS/A/2, Minutes Vol. 2, Sixty-First Meeting, 2 March 1899; This was the first extra-metropolitan meeting of the society, but it was not envisioned in the same light as the meeting in Edinburgh, 1903.

⁸⁶ RSMA, NS/A/2, Minutes Vol. 2, 79th Meeting of the Neurological Society of London.

⁸⁷ RSMA, NS/A/2, E. A. Schafer to W S Coleman, 22 January 1903.

⁸⁸ RSMA, NS/D/2, Neurological Society Attendance Book, 1898-1907.

meeting of a travelling medical club, than it did a gathering of provincial members who found it difficult to access the capital.

The Society planned a second meeting for provincial members for 1905, perhaps in recognition that the first meeting had not been the hoped-for success. Extra-metropolitan members received special letters of invitation from metropolitan members, offering an elegant supper, paid for by a guarantor's fund, as an additional incentive for members in the provinces to come.⁸⁹ Members from London, however, were required to pay twenty-five shillings for their food and drink.⁹⁰ The meeting was mainly on clinical and pathological subjects. The supper was extravagant.⁹¹ As they supped through eleven courses including *Terrine de Volaille à l'Ancienne* and *Filets de Bœuf Richelieu*, members offered numerous toasts to the Society and the Guests washed these down with a steady stream of fine wines and liqueurs.⁹² The minutes of this meeting recorded it as an outstanding success, with eighty-four members in attendance, forty-seven from the provinces.⁹³

Normally the ordinary meetings were less ostentatious. Although the Society's members were the academic and medical elite, its meetings were not really venues for advertising personal attainments, distinction, or wealth. Instead, what was on display at these meetings was an eclectic array of medical and scientific knowledge(s), technologies,

⁸⁹ RSMA, NS/F/1, Fred Batten to Members of Neurological Society, 11 January 1905.

⁹⁰ RSMA, NS/F/1, Neurological Society of the United Kingdom, p. 1.

⁹¹ RSMA, NS/F/1, Program of Meeting of the Neurological Society of the United Kingdom, 24 June 1905.

⁹² RSMA, NS/F/1, Menu (3 pages), 24 June 1905.

⁹³ RSMA, NS/F/1, Names of Extra-Metropolitan Members who have accepted.

hypotheses, and experiments. All designed to enquire into the structures and functions of the nervous system in all manifestations.

Not only was new knowledge being disseminated, methods of presentation were also being invented. As D'Arcy Power recalled of earlier medical societies in 1939, in the past written papers had often been 'illustrated by diagrams and by chalk drawings upon a blackboard, but as science advanced, by lantern slides, by epidiascope and by moving pictures.'⁹⁴ In 1893, the society, following this general pattern, held photo exhibits of current experiments. A comparative series of photographs showing 'degeneration of the medullar and spinal cord following ablation of the cerebral hemispheres in mammals' were available for inspection, and Charles Sherrington presented photographs demonstrating the dermatomes of upper sensory roots.⁹⁵ At a meeting in 1897, Fred Batten offered a study on 'The muscle spindle under pathological conditions' and illustrated his presentations with 'lantern slides' and by 'specimens under the microscope'. Two further demonstrations that year also utilized 'lantern slides' to finesse lectures. E A Sharpey-Schäfer's lecture 'Is there a direct relationship between the motor paralysis produced by lesions of the cortex and loss of sensibility, muscular or other,' was 'illustrated by Lantern Slides, three living monkeys and the brain of a fourth, which had been killed'. Professors Boyce and Warrington employed slides to illustrate their comparative anatomical discussion, 'Contributions to the anatomy of some of the ascending and descending nerve tracts in the fowl.'⁹⁶ While such 'cutting-edge'

⁹⁴ D'Arcy Power ed. *British Medical Societies*, p. vii.

⁹⁵ RSMA, NS/A/1, Report of the Council, 25 January 1894.

⁹⁶ RSMA, NS/A/2 Report of the Council, 14 January 1897.

presentations were only for physiological and anatomical discussions, the clinical presentations nonetheless paraded actual patients before the audience.

The clinical meetings of the Society were reminiscent of medical school and post-graduate teaching in ward rounds. These were a typical highlight of meetings of medical societies in this period. Usually young physicians presented patients (called specimens in this context) with rare or interesting nervous diseases to the audience, who then discussed the neurological elements of the conditions. Usually a junior physician began by presenting the patient's case history to the audience, and then he proceeded with a physical examination intended to demonstrate the interesting signs. When possible, the audience saw multiple examples of the same conditions so that they understood the variability of the symptoms. Sometimes the cases presented were of uncertain diagnosis, and on these, the entire audience deliberated in an attempt to identify the condition.

The 113th ordinary meeting of the Neurological Society, which took place in the late evening of March 1905, was typical. Gordon Holmes presented a ten-year old boy with a 'midbrain lesion' and an unimportant family history. 'Four years ago he became unsteady on his feet, and began to stagger like a drunken man.' The child's gait had become steadily worse, the usage of the left-arm was gone, the right arm was beginning to shake, and his head and eyes generally deviated to the left. While sight and hearing were normal, he had developed a squint and paralysis of the left eye. Holmes then ended with

the simple statement ‘there is considerable mental defect’.⁹⁷ Unrecorded was his diagnosis, prognosis, or treatment.

Similarly, Wilfred Harris presented ‘a case of chronic chorea’:

An engine driver, aged 63, while at work ten years ago strained his back, causing such pain in the left side of his back that he had to walk home doubled up. He has never walked properly since, and soon afterwards became unsteady in his gait. At the same time his articulation became altered and slow, and he was often accused of being drunk, though a teetotaller. He had not been able to do any work for the last nine years.⁹⁸

Harris then continued by outlining other symptoms including incontinence, poor memory, changes in spatial reasoning, and added that he ‘denies venereal diseases’. As he finished, Harris suggested that the case appeared similar to a combination of ‘spastic paralysis and chronic chorea, and might be labelled *spastic chorea*’. Once again, there was no treatment, diagnosis, or prognosis recorded.⁹⁹

Part of these presentations was deliberate showmanship.¹⁰⁰ The skills of the physicians presenting the case was often a fusion of rhetorical imagery and medical knowledge; metaphors, analogies, and similes were utilized to accentuate messages, but were

⁹⁷ RSMA, NS/A/2, Neurological Society of the United Kingdom, 113 Meeting, 30 March 1905, pp. 2-3.

⁹⁸ *Ibid.*, pp. 3-4.

⁹⁹ *Ibid.*

¹⁰⁰ This showmanship was not restricted to clinical meetings only. See Thomas Buzzard’s Presidential Lecture of 1890. Thomas Buzzard, ‘On the Simulation of Hysteria By Organic Disease of the Nervous System’, *Brain*, Vol. 13 (1890), pp. 1-44.

deployed less frequently to describe actual symptoms and signs. Precise language was a measure of precise clinical skills. The manners, maturity, and acumen of the physician's bedside practices – the art (and bread and butter) of medicine – were part of the display, and a strong or weak performance would leave a lasting impression with the audience.

Presumably, though there is no evidence, there were discussions at these clinical meetings after the presentations, and these would have been similar to the conversations later recorded in the Proceedings of the Section of Neurology of the Royal Society of Medicine. Physicians asked questions about patient histories, sometimes challenged diagnoses, and at other times entered into broader dialogues about the underlying pathologies. The focus of these clinical demonstrations could become decidedly scientific. The physiology and anatomy of the nervous system contrasted with broader theoretical (even philosophical) musing. Simultaneously these diseases provided clues to normal functioning of the nervous system. The discussions would have embraced all of these elements. With its diverse audiences, the Society's clinical meetings provided multiple points of view and questions about allied diseases and disorders. The exchanges would have been open and the dialogue sometimes heated, as physicians and scientists aligned themselves with specific theoretical positions and medical perspectives.¹⁰¹

¹⁰¹ Such debates were frequent. For example, see: D. Hack Tuke, "Imperative Ideas", *Brain*, Vol. 17, (1894) pp. 179-197 and the subsequent debate, "On Imperative Ideas, being a discussion on Dr Hack Tuke's Paper", *Brain*, Vol. 18 (1895), pp. 318-351.

Meetings could also be strictly educational.¹⁰² Physicians would introduce new theories, techniques, and occasionally therapies. Typically, the inaugural lectures of the presidents of the Society described or took positions on the latest changes in neurological knowledge, techniques, and therapy (which was almost exclusively surgical). In 1893, the physiologist, Professor E A Sharpey-Shäfer, gave his presidential lecture on ‘The nerve cell as the basis of neurology’ and defended the neuron theory against reticular schools of thought.¹⁰³ Alexander Hill (1856-1929), the Master of Downing College Cambridge, addressed the Society on the topic of, ‘The chrome silver method: a study of the conditions under which the reaction occurs and a criticism of its results.’¹⁰⁴ Victor Horsley presented a neurosurgical analysis of a ‘case of removal of a cerebellar tumour, two years and five months after operation’ in 1896.¹⁰⁵

Although we could frame the formation of a neurological society as another example of specialization and professionalization, there is a striking absence of such a social agenda in the archives of this society. The officers and council of the Society did not seem concerned with legislation, organization, education, or a code of conduct for neurological practice, although we could view the publication of a professional journal, the formation of the society, and the effort to include members from provinces this way. Nor was there any effort to homogenize the membership of the society: physicians, surgeons, alienists,

¹⁰² For example see the Presidential Address of John Batty Tuke, “The Relation of the Lunacy Laws to the Treatment of Insanity”, *Brain*, Vol. 28, (1905), pp. 1-12.

¹⁰³ RSMA, NS/A/1, Neurological Society Report, 25 January 1894; E A Schäfer, “The Nerve Cell Considered as the Basis of Neurology”, *Brain*, Vol. 16, (1893), pp. 134-169.

¹⁰⁴ RSMA, NS/A/2, Neurological Society Report, 14 January 1898.

¹⁰⁵ RSMA, NS/A/2, Neurological Society Report, 1897.

philosophers, and scientists were equally welcome. These facts nicely contrast with the proceedings of the Ophthalmological Society, which published reports and attempted to implement changes in government policy benefiting Ophthalmological practice. During the Neurological Society's twenty-one year history, only one action seemed fundamentally intent upon creating a tradition, and that was the creation of the Hughlings Jackson Lectureship in 1897.¹⁰⁶

The creation of an honorary lectureship while Jackson was still alive was a rather odd decision on the part of the council, although as Walter Coleman (1864-1934) pointed out at the time, it was not without 'precedent', because the Ophthalmological Society had done this for William Bowman.¹⁰⁷ (Surely, this is further evidence of the close relationship between these two societies.) The Council announced in early 1897 the establishment of a Lectureship celebrating the Discover of 'Cortical Epilepsy and its relation to cerebral localization' and noted that Hughlings Jackson had consented to deliver the first lecture.¹⁰⁸ In December of 1897, Jackson spoke on the 'Relations of different divisions of the central nervous system to one another and to parts of the body'.¹⁰⁹ Lectures followed subsequently every three years. Eduard Hitzig (1838-1907) gave the next lecture in 1900; William Broadbent (1835-1907) in 1903; and Victor

¹⁰⁶ Discussion about this began in 1896. 'The Secretary read a letter from Dr [Walter] Coleman, which advocated the desirability of founding a lectureship in honour of Dr Hughlings Jackson. Dr Coleman pointed out a precedent existed in the [Bowman] lectureship founded by the Ophthalmological Society during the lifetime of Sir W Bowman.' RSMA, NS/A/1, Minutes Forty-Seventh Meeting, 19 March 1896, Vol. 1. A list of Hughlings Jackson Lecturers appears in Appendix A.

¹⁰⁷ RSMA, NS/A/1, Minutes Fortieth-Seventh Meeting, 19 March 1896, Vol. 1.

¹⁰⁸ RSMA, NS/A/2, Neurological Society Report, 14 January 1897.

¹⁰⁹ RSMA, NS/A/2, Neurological Society Report, 1898.

Horsley (1857-1916) delivered the 1906 Lecture – the first to honour Jackson’s contributions specifically in the title: ‘On the illustration by recent research of Dr Hughlings Jackson’s views on the functions of the cerebellum’.¹¹⁰ It was a tradition that continued, even after the Neurological Society disbanded.

The Neurological Society of the United Kingdom restructured with the 1907 formation of the Royal Society of Medicine (RSM), where it became the Section of Neurology. How this happened will be briefly recounted in the next section, but for now it is only necessary to know that the Council of the Society actively participated in planning the Royal Society of Medicine from the moment it was proposed. This indicates one manner in which the Neurological Society always stood at the crossroads between medical generalism and specialism. It was a practical equilibrium¹¹¹

The Temporary Equilibriums of Practice: Between Generalism and Specialism

Why were specialization, institutionalisation, and professional autonomy not central goals of the Neurological Society of the United Kingdom? There is scant evidence in the archives of this society or in the reports of its proceedings offering clues. It is clear that there was none of the flamboyance of Hughlings Jackson’s Bowman Lecture to the Ophthalmological Society, which had cast neurologists as part of a continuum of medical specialists linking the differentiation of the ‘body medical’ into a universal story about the progress of medicine. If the Neurological Society had evolved out of such rhetoric, why had the rhetoric for separatism and political autonomy not continued?

¹¹⁰ All of these lectures were published in *Brain*, with the odd exception of the first one by Jackson.

¹¹¹ RSMA, NS/A/2, “The Neurological Society of the United Kingdom Circular”, 28 May 1907.

Partly the answer maybe the Society's second rule which stated: 'The objects of the Society shall be to promote the advance of Neurology and to facilitate intercourse amongst those who cultivate it, whether from a Psychological, Physiological, Anatomical, or Pathological point of view.'¹¹² Certainly, the Society had adhered to this expansive principle. The Presidents of the Society, for example, came from a diverse range of professional experiences, and included surgeons, physicians, anatomists, alienists, and physiologists. Yet, this multidisciplinary representation had significant ramifications. Not the least was that there was never a discussion about what delineated a 'neurologist'. In the absence of a professional definition, the Society defaulted to another position best articulated by two of its rules: 'Any one engaged in researches on Neurology, or manifesting interest in such researches, shall be eligible for the Ordinary Membership' And, 'Men of distinction in science, who have contributed to the advancement of Neurology, shall be eligible for the Honorary, or for the Corresponding Membership.'¹¹³

These rules embraced a broad spectrum and handed no particular authority to medical practitioners. Physiologists and anatomists (who admittedly tended to be medically qualified) occupied authoritative positions in this society, though surgeons and physicians did as well. Perhaps (if it was even an issue) there was simply too little refinement of neurology's definition for a stable specialty to emerge. It was, to borrow Eliot Freidson's language, as though the knowledge possessed and applied by neurology was too multi-

¹¹² "Proceedings of the Neurological Society" *Brain*, Vol. 28, (1905) p. 609.

¹¹³ *Ibid.*

faceted.¹¹⁴ The neurologist was anyone researching ‘nerves’, a fact that made precise delineation impractical. Moreover, such delineation was not really an issue to the founders of the Neurological Society. Without recourse to a more limited professional definition, many reserved the professional designation ‘neurologist’ for very few individuals. If used, the label ‘neurologist’ was a professional identification serving more as a badge of status and a distinction of intellectual interests. The early character of the society was impressionistic, and its Presidents, just like its members, brought their own fleeting view of what constituted neurology to the Society’s meetings. This fluidity, I would argue, became a sign of the generalist power and prowess of this community’s members.

Such judiciousness and mutability undoubtedly left a rich treasury for any heir-apparent to neurology (such as internal medicine, psychology, neurosurgery, and psychiatry) to plunder. Certainly by the turn of the century there was within this medical system, what Abbott termed, on-going jurisdiction conflicts between vying specialties.¹¹⁵ At the same time, applying too much focus to the volatility within the medical system neglects another important aspect. It would be inappropriate to marginalise the idealistic intentions driving the scientific pluralism underlying neurology. Neurology was a special subject, and practicality demanded a special definitional relativism.

¹¹⁴ Eliot Freidson, *Profession of Medicine: A Study of the Sociology of Applied Knowledge*, (New York; Dodd, Mead: 1970). In his study, Freidson attempted to oppose the knowledge a profession possesses against how the knowledge can apply, which tends to be dependent on conditions.

¹¹⁵ His case study is of psychiatry and neurology in America. Abbott, *The System of the Professions*, ch. 9.

Neurology was a word ascribed to a series of practices, paradigms, and focuses in a variety of disciplinary arenas, and importantly each had historical roots, which, as Rousseau has pointed out, derived from a past rich with cultural traditions of nervousness and sensitiveness.¹¹⁶ Equilibrium in these values was always temporary. If anatomical structures bounded neurology – the nerves – then, it remained true that an unbounded mind governed the nervous body. Dividing the nervous system’s various portions into a disciplinary stew was dangerous. It encouraged a narrowness of medical and scientific perspective incapable of spotting important contradictions. An equilibrium between general and specialist values protected neurology from devolving into a reductive conversation.

There were ideological motivations for definitional ambiguity, for the temptation to materialism in neurology threatened whole centuries of idealist thought, an issue germane to many Oxford and Cambridge classically trained physicians and physiologists, who comprised the base of the membership of the Neurological Society. As David Millett has pointed out, the rise of a physiology of brain without a physiology of mind in Britain was markedly in contrast to Germany, and pointed to this underlying idealism.¹¹⁷ Still the concomitancy of behaviour, psychic states, and simple reflexes suggested a state of evolutionarily optimized efficiency, upon which one might lay the foundations for a new, monist and modernist philosophy. Because such intellectual opportunities were available, and because there were so few concrete facts, British physicians may have conceived

¹¹⁶ George Rousseau, “Originated Neurology” in *Nervous Acts: Essays on Literature, Culture and Sensibility*. (Palgrave Macmillan, 2004).

¹¹⁷ David Millett, *Wiring the Brain: From the excitable cortex to the eeg, 1870-1940*, pp. 11-12.

neurology broadly to prevent it from being usurped by political theorists, drawing upon its knowledge for rhetorical advantage.¹¹⁸

This equilibrium between specialist and generalist practice appeared for other reasons. The lack of uniformity allowed neurology to flourish in the social light of respectability. Active members, for instance, who were or would become Presidents of the Royal College of Physicians, men like Thomas Barlow (1845-1945) or John Rose Bradford (1863-1935), could be members without signalling to constituents, admirers, and adversaries, divisive inclinations. Weisz has argued that the ascendance of the specialist in British medical culture can be seen in the appointment of specialists like these to the Royal College of Physicians or Surgeons. He offers, for example, that, ‘in 1903, the ophthalmologist John Tweedy was elected president of the College’ of Surgeons.¹¹⁹ Still, it would be important to note that Tweedy was also an active member of the Neurological Society.¹²⁰ As the then Johns Hopkins Professor but later Regius Professor at Oxford, William Osler argued in 1892, ‘the student of internal medicine cannot be a specialist. The manifestations of almost any one of the important diseases in the course of a few years will “box the compass” of the specialties.’¹²¹ Osler might have been speaking of

¹¹⁸ See Smith’s comments on Soviet Psychology, *Human Sciences*, p. 783-798; for the wider context, see Dorothy Ross ed. *Modernist Impulses in the Human Sciences, 1870-1930* (Baltimore and London: Johns Hopkins University Press, 1994).

¹¹⁹ Weisz, *Divide and Conquer*, p. 36.

¹²⁰ Nor was he alone in having been a President of the Royal College of Surgeons. See Appendix A, List A12.

¹²¹ William Osler, “Internal Medicine as a Vocation” in *Aequanimitas: with other addresses to medical students, nurses, and practitioners of medicine* (London: H.K. Lewis & Co. Ltd, 1946), p. 133 but see pp. 133-145.

neurology. The parallels between the total natures of both subjects were apparent to any of neurology's heterogeneous enthusiasts.¹²² Both subjects balanced generalist intuitions against specialist perspectives.

In retrospect, the location of the Neurological Society appears one comfortably and conveniently situated between the mores of a culture opposed to medical specialization and the generalist reality of medical practice. As Berg has remarked on medical practices their 'rationality speaks a plural tongue'.¹²³ To be otherwise, the Neurological Society would have had to balk the medical mainstream and to dirty their hands with politics. There was no such agenda. Yet, even if achieving political legitimacy for the specialty had been an aim of the society, political action would have been difficult, because the control of much of the medical establishment was firmly in the hands of professors of medicine and hospital and university administrators incapable or unwilling to concede the need for specialists. The Society's conservatism was a wise course of action.

By 1906 British medical culture's concern to prevent specialization reached a zenith, and a coalition of elite physicians, including the neurologist Henry Head (there by request of

¹²² Nor need this be seen as a systematic approach to medicine, or even a holistic view of the body. It had practical implications. One of the important revelations of Ock-Joo Cho Kim's dissertation was that Harvey Cushing perceived neurosurgery as a process of integration between systemic problems of the body and technical interventions. If Cushing's approach was specialist, the scientific practices he utilized were philosophically generalist, and it was in the generalist practice that the practical implications emerged. *The Integration of Science with the Healing Art: Harvey Cushing's Development of Neurosurgery, 1896-1912*, PhD diss., University of Minnesota, 1998.

¹²³ Marc Berg, "Turning a Practice into a Science: Reconceptualizing Postwar Medical Practice" *Social Studies of Science*, Vol. 25, No. 3 (1995): 437-476, 465.

the Council of the Neurological Society), proposed the formation of an umbrella medical society, which, though divided into specialist sections, would grant access to a larger non-specialist audience.¹²⁴ Each section originated from a former specialist society that had appeared during the past years. The amalgamation of these societies was absolute: libraries (remnants of now long past circulating scientific book societies), money that the societies had accumulated through membership dues and endowments, and the members of these societies were all to be passed to the aegis of the new Royal Society of Medicine. In exchange members were to be given a new building in which they could meet, granted access to a larger medical library, and most importantly given access to knowledge that had been monopolised previously in meetings of other specialist societies.

The pressure on specialist societies to amalgamate with the Royal Society of Medicine must have been enormous.¹²⁵ What the consequences of not joining would have been is difficult to know, but there was certainly a metonymic value to the name of the new society that indicated a *de facto* generalism. Declining to join was tantamount to exclusion from medicine. In any case, the Neurological Society's members relished the opportunity. Without even hints of concern about their professional autonomy, the society's membership voted unanimously to join. In 1906, the Neurological Society of the United Kingdom dissolved, and the Section of Neurology of the Royal Society of Medicine formed.¹²⁶

¹²⁴ RSMA, NS, Union of Medical Societies, Report of the Executive Committee as amended and adopted at the Meeting of the General Committee of Representatives of the Societies, held on July 19th, 1905.

¹²⁵ Weisz, *Divide and Conquer*, pp. 41-43, 176, 223.

¹²⁶ RSMA, NS/A/2, Report of the Council for 1906, February 21st, 1907 Vol. 2.

Interestingly, the Ophthalmological Society of the United Kingdom found an alternative solution – one that the Neurological Society might also have adopted.¹²⁷ Claiming that total dissolution would unfairly exclude its overseas members, the Society opted for a comfortable middle ground.¹²⁸ The Section of Ophthalmology of the Royal Society of Medicine became its London-based chapter. However, the Ophthalmological Society would still hold one yearly general meeting, which all members might attend. This meeting would take place in various cities across the United Kingdom, and consequently members unable to benefit from the London-based meetings would still have access to the Society. This was a similar justification members of the Section of Neurology would use when forming the Association of British Neurologists twenty-five years later.¹²⁹

Conclusion

Scholars have offered various theories for specialization. Some contend it occurs mainly for economic reasons, while others argue that it is prompted by scientific progress. Stevens, for example, describes an almost archetypical chronology: firstly, physicians build a special hospital; then a specialist society and journal are founded, and finally departments in universities and general hospitals are created.¹³⁰ On one level, this pattern appears in British neurology. The National Hospital for Diseases of Epilepsy and Paralysis appeared in London in 1859, the journal *Brain* started in 1878, and the

¹²⁷ Weisz, *Divide and Conquer* p. 207, notes that other specialties found similar solutions, which actually unified fields in the Royal Society of Medicine. Thus, obstetrics and gynaecology aggregated together. That neurology and psychiatry were not is interesting, and it is important to note the Section of Psychiatry only formed in 1912.

¹²⁸ For a discussion, see D'arcy Power ed. *British Medical Societies*.

¹²⁹ Editorial "International Neurological Congress, Berne" *JNP* Vol. XXI, No. 45 (1931), pp. 66-68.

¹³⁰ Stevens, *Medical Practice*, pp. 26-38.

Neurological Society of the United Kingdom formed in 1886. Subsequently, hospital and university departments were established. However, this chapter sets out an alternative perspective: Generally, scholars have ignored the embedded nature of these specialties. The argument here has been that physicians founded the Neurological Society because of events that occurred first at the Ophthalmological Society of the United Kingdom, and, in its proceedings, it was profoundly similar to that society. Moreover, both societies mimicked practices found in many past and contemporary societies and associations. Yet, whereas the Ophthalmological Society adopted a political stance seeking to influence government, create legislation, and represent specialist ophthalmology in Britain and the commonwealth, the Neurological Society preferred docility. Its membership, broad in their interests and tastes, and generalist in their medical practices, conformed more to social and cultural expectations. Thus while it might seem a process affirming specialists, the dissolution of the Neurological Society into the RSM was part of a broader movement to keep medicine unified and diminish the importance and autonomy of specialist societies; it was a defence of generalist values. This generalist movement had lasting ramifications for the practices of neurology in Britain.

The next chapter explores ways the practices of medical generalism appeared in the Royal Society of Medicine and the Association of Physicians, another generalist society founded in the same year as the RSM. Notably, the Neurological Section of the RSM had 242 members when it appeared. A comparison between membership lists of the Neurological Society of the United Kingdom in 1905 and the Association of Physicians of Great Britain and Ireland in 1908 shows that 62 members of the Neurological Society

were also original members of the Association of Physicians, which had 238 members.¹³¹

My focus on the Association of Physicians is not merely convenient, for neurologists later cited its meetings as a model for how their proceedings should be but were not in the RSM, and these neurologists subsequently formed the Association of British Neurologists in 1933. Seven physicians who participated in founding the Association of British Neurologists had been members of the Neurological Society of the United Kingdom, and they had held joint membership in the Association of Physicians and the Royal Society of Medicine since 1912. The broader point I am making here is that medical generalism exerted a profound affect on the practices of neurology. It is perhaps best to say that initially medical generalists had affiliations with neurological societies. When, how, and why those medical generalists identified their practices as ‘neurological’ is the analysis of this dissertation.

¹³¹ See Appendix A Chart A1-A5; moreover, a comparison between a membership list from 1933 of the Royal Society of Medicine’s Section of Neurology (316 members) and a list of the Association of Physicians (273 members) shows that 46 individuals held joint membership in both societies.

CHAPTER 4

Constellations of Practice: Generalism, Specialism, and the Social Parallax of War

‘Every cloud has a silver lining.’¹

Introduction

The Neurological Society of the United Kingdom dissolved in 1907 and became the Section of Neurology of the Royal Society of Medicine. The dissolution and subsequent ‘amalgamation’ of sixteen specialist societies, including the Neurological Society, into the Royal Society of Medicine has been cited as explicit endorsement of medical specialization in Britain.² Stevens conceded the Royal Society of Medicine, like the British Medical Association, did not grant specialist sections ‘exclusive rights over admittance to each specialty’, but she argued that recognition of sixteen individuals specialties in medicine and surgery nonetheless occurred.³ Weisz, concurring, argued that the essential aim of the Royal Society of Medicine was to ensure that general medical practice and the specialties remained tied together. He added ‘the founding of the Royal Society of Medicine represented the belated acceptance of specialization by the British medical profession and that, as a purely learned society, it recognised specialties as categories of knowledge rather than as divisions of practice. That it was also meant to

¹ In popular idiom, ‘every cloud has a silver lining’ is an idiom referring to the belief that there are always compensations for every apparent difficulty or unpleasantness.

² David Williams, “RSM 1907: The Acceptance of Specialization” *JRSM*, Vol. 93 (2000), pp. 642-45; Penelope Hunting, *The History of the Royal Society of Medicine* (London: Royal Society of Medicine Press, 2001)

³ Stevens, *Medical Practice*, quote on p. 51, also see p. 31; it would be interesting to find out if the RSM excluded certain societies or they opted out, and, if so, what happened to them.

combat excessive specialization is less frequently recognised.’⁴ Thus, in the view of these authors, the Neurological Society of the United Kingdom lost little autonomy by joining the Royal Society of Medicine, and neurology was recognised as a specialty by the medical profession.

This view, however, ignores that joint meetings occurred between multiple sections, and that large general meetings for all members, such as the Address of the President of the Royal Society of Medicine, were commonplace. In addition, members could attend or present at any of the sections, and elite members were frequently Presidents of multiple sections. Edward Farquhar Buzzard had been President of the Medical Section, the Psychiatry Section, and the Neurological Section.⁵ Macdonald Critchley and Charles Symonds were Presidents of the Neurological and Psychiatric Sections. It is also noteworthy that a committee of elected representatives comprised of council members from each section carried out management of the society, indicating higher-level administrative unification within the society.⁶ Considering that all sixteen sections had had far greater control over the selection of members and publication before amalgamation, the movement creating this society appears less of an endorsement of medical specialization and more a defence of the culture of medical generalism.⁷

⁴ Weisz, *Divide and Conquer*, p. 41

⁵ A. M. Cook, *Sir E Farquhar Buzzard*.

⁶ See Appendix E.

⁷ Publishing became a significant issue for the Neurological Section in the interwar period for two reasons. The Royal Society of Medicine held a copyright over its proceedings, and during the Anglo-American Neurological Conference of 1927 (discussed in Chapter 6), special permission was required from the Editorial Committee of the Royal Society of Medicine for the American Neurological Association to print abstracts of the meeting. Second, to pay for burgeoning publishing costs, the Editorial Committee regularly

In the case of the former members of the Neurological Society, the Royal Society of Medicine's ethos of medical generalism was not troubling. Many members of the former neurological society had never perceived themselves as exclusive nerve specialists, and saw themselves as physicians (or scientists) with an interest in the nervous system. Consultant physicians did not need to specialise, and scientific interests in neurology were not indicative necessarily of a practice in the clinical specialty and were matched by equal interests in subjects like ophthalmology, physiology, or eugenics.⁸ Although their academic interests might be in specialised areas, those interests did not limit their medical practice. In America in the same period, Andrew Abbott has argued, 'as long as the theme of nerves entered somewhere – in symptoms, aetiology, pathology, or physiology – a disease could be located under the new specialty.'⁹ In Britain, by contrast, the practice of neurology was sublimated into general medicine.

It was only *after* the First World War that medical generalism appeared anti-progressive and restricted by traditionalism. State policies were integral in fomenting a process of rationalisation that questioned generalist medical frameworks and values. The Haldane Commission of 1909-13, for instance, had called for the systematic development of

requested increases in the Society's membership, diminishing their already limited exclusivity. See: RMSA, K73, Minutes of the Royal Society of Medicine Neurological Section Council, 28 October 1920, p. 172. Neurological Section Council (hereafter, Council Minutes); Macdonald Critchley complained about this in "50th Anniversary Dinner Party of the Association of British Neurologists," folder "Origins." (c.1983), p. 5 Archive of the Association of British Neurologists (hereafter, AABN).

⁸ Eugenics and neurology and psychiatry is a theme explored by Showalter, *The Female Malady*, pp. 102-120; also see, Oppenheim, *Shattered Nerves*, pp. 265-292.

⁹ Andrew Abbott, *The System of Professions*, p. 287

clinical medical ‘units’ within hospitals and universities in London.¹⁰ Even more important were strategies of logistic management that emerged between 1914 and 1918, these stimulated rationales for establishing specialist departments inside the general hospitals. Numerous specialties that emerged in the field, like ‘cardiology’, which had surfaced from a war-condition called ‘soldier’s heart’, began to appear as autonomous hospital departments.¹¹ Other specialties, such as neuropsychiatry and orthopaedics, that had become permanent fixtures of military medicine, emerged in this way as well.¹²

This chapter explores how clinical neurology as an exclusive specialty began emerging from generalist practices, and argues that the immense social upheaval occurring in British society during the war was decisive in shifting medical culture towards the necessary specialised paradigm.¹³ It begins by exploring the proceedings of the Royal Society of Medicine and compares those with another society founded in the same year, the Association of Physicians of Great Britain and Ireland. Between 1907 and 1913,

¹⁰ Anne Hardy, *Health and Medicine in Britain since 1860* (New York, Palgrave: 2001), pp. 66-68; On the Haldane commission see Francis Fraser, ‘The Rise of Specialism and Special Hospitals’, p. 181. I know of no scholarly work that has actually shown how divisions of medical labour in the field were incorporated into the administrative thinking in the post-War period. This would be a worthwhile study, which would strengthen or weaken the relationship between medical specialisation and war.

¹¹ Joel Howell, “‘Soldier’s Heart’: The Redefinition of Heart Disease and Specialty Formation in Early Twentieth-Century Great Britain” in *The Emergence of Modern Cardiology*, ed. William Bynum, Christopher Lawrence, and Vivian Nutton, *Mhist*, suppl. No. 5 (London: Wellcome Institute Press, 1985), pp. 34-52.

¹² Jack Pressman, *Last Resort: Psychosurgery and the Limits of Medicine*, (Cambridge University Press, 2002); Roger Cooter, *Surgery and Society in Peace and War: Orthopaedics and the Organisation of Modern Medicine, 1880-1948*, (Houndsmill: Macmillan Press, Ltd, 1993).

¹³ This social transformation was slow and that it is difficult to determine what ways military transformations cause broader social transformations. On this point, see Anne Hardy, *Health and Medicine*, pp. 47-76.

meetings of both societies advocated and defended generalist values. The Association of Physicians of Great Britain and Ireland did not meet during the War, and the meetings of the Neurological Section of the Royal Society of Medicine were notably diminished in frequency, number of attendees, and output.

Realities arising from the War proved to be the parallax requisite for medical specialization to occur in Britain.¹⁴ Parallax denotes a change in the perception resulting from a change in the viewer's position, and I use it here because of recent criticisms against progressivist historians who have equated war with scientific progress.¹⁵ Though it is undeniable that the war changed British society and culture, it is unnecessary to circumscribe those changes within a triumphant story of progress. It is important, however, to identify that practitioners' perceptions of how medicine should and could be organized, changed irrevocably by the close of the war. For my purposes, it is important only to explore the way that change was mediated in neurology.

Most practitioners with an interest in nervous conditions and injuries sensed changes in their practice wrought by War. The experiences of war changed collective perceptions of their community and identities. One difference after the war was that neurologic

¹⁴ Weisz, *Divide and Conquer*, pp. 165-167; Stevens, *Medical Practice*, pp. 38-43.

¹⁵ Roger Cooter and Steve Sturdy, "Of War, Medicine, and Modernity: Introduction" in *War, Medicine, and Modernity* in ed. Roger Cooter, Mark Harrison, and Steve Sturdy (Stroud: Sutton, 1998), pp. 2-7, especially p. 7. The appeal to progress in knowledge through war research was made by neurologists. See, for instance, Percival Bailey, "The Present State of American Neurology" *Journal of Neuropathology and Experimental Neurology* Vol. 1 (1942), pp. 111-113; Andrew Oliff, "History and Development of Neurology as a Distinct Specialty in America" *Journal of Civil War Medicine*, Vol. 3, No. 1 (1999), pp. 33-41.

knowledge acquired a new political and social relevance, which resulted from the numerous cases of soldiers with shell shock, head-wounds, and spinal and peripheral nerve injuries. As a new ethos favouring the rationalisation of medicine and science replaced the generalist medical culture that had defined British medicine in earlier periods, it promoted various institutional re-arrangements that sharpened many specialties' definitions, including neurology, which acquired a more precise institutional, political, and social definition in the interwar period.¹⁶ This transformation was far from immediate. The 1933 formation of the Association of British Neurologists (ABN) was the moment when the specialty acquired political autonomy in Britain. It was thus not a coincidence that when neurologists founded the ABN, they aired the political inadequacies of the Royal Society of Medicine. Nor was it coincidental that the ABN's founders offered the Association of Physicians of Great Britain and Ireland as an example of how their new association might function. Exclusivity, the autonomy to control membership, and the holding of general meetings in London and in the provinces, were powers the Association of Physicians had at its disposal.

The Temporary Ascent of Generalist Practice

The pre-war years at the Royal Society of Medicine were uneventful, and the proceedings of Section of Neurology changed little from their pre-amalgamation format in the Neurological Society of the United Kingdom. There were President's addresses, lengthy

¹⁶ Rationalisation and Britain are discussed in Mark Harrison, "Medicine and the Management of Modern Warfare: an introduction" in Roger Cooter, Mark Harrison, and Steve Sturdy ed. *Medicine and Modern Warfare* p. 2. These authors rely on the Max Weber's definitions of rationalisation; therefore, see on Max Weber, Smith, *Human Sciences*, pp. 545-564.

research communications, notices of new methods, and regular clinical meetings at which interesting patients were presented to an enthusiastic audience. There were also joint sessions between two or more sections. Before the war, the Neurological Section, for example, met jointly with the Ophthalmological Section, the Section of Medicine, and the Section of Psychiatry.¹⁷ In addition, neurological contributions were common in the proceedings of other Sections, although it is significant other sections' members were rarely extended the reciprocal privilege. The first notable event took place at a 1916 Council Meeting, where: 'The question of enemy aliens, who are Corresponding Members of the Section, being allowed to retain their position, was considered, and the Council was unanimously of the opinion that their names should be expunged from the list at the conclusion of the War.'¹⁸ By 1916, emotions were running high, but as a rule, the proceedings of the Section of Neurology before 1914 were politically apathetic.

It is likely that the London-centric nature of the Royal Society of Medicine would have worn thin with physicians practicing and conducting research elsewhere, had it not been for the foundation simultaneously of a national association of physicians. The Oxford Professor of Medicine, William Osler, had first suggested the new Association to some of his friends, known as 'the gang', in 1906.¹⁹ Osler, Archibald Garrod (1857-1936), Humphrey Rolleston, William Hale White (1857-1949), John Rose Bradford, and

¹⁷ See *PRSM* throughout 1907-1960 for the joint discussions. Note that these discussions were published separately from the proceedings of individual sections.

¹⁸ RSMA, K73, Council Minutes, 5 April 1916, p. 128.

¹⁹ Archives of the Royal College of Physicians (Hereafter ARCP), Association of Physicians of Great Britain and Ireland (hereafter AP), 2434/100, Notes on the history of the Association by Dr Herringham, pp. 1-2.

Jonathan Hutchinson (note that the last three were active members of the former Neurological Society) envisioned it as a ‘pleasant gathering’ and ‘nucleus’ for the medical men ‘actively engaged in research’.²⁰ They circulated their idea to professors of medicine scattered throughout the country, who all agreed eventually to sign a letter of invitation to ordinary members. Late that year they sent letters to a limited number of physicians engaged in medical research. Exclusivity was imposed specifically so ‘that it might be considered an honour to belong to’ the new Association.²¹ In what may be another indication of the antipathy members of the former Neurological Society felt for medical specialization, sixty-two of its past members were original members of the Association of Physicians.

The Association of Physicians of Great Britain and Ireland officially appeared in 1907 and started with 232 members.²² *The Quarterly Journal of Medicine*, the official organ of the society, was established at the same time. Its objective was ‘the advancement of Internal Medicine, and the promotion of friendship among physicians.’²³ It also intended to be representative of every ‘division of the Kingdom’.²⁴ The Association’s first President was Richard Douglas Powell (1842-1925), a man ardently opposed to specialization in medicine and then President of the Royal College of Physicians and a dominant figure involved in establishing the Royal Society of Medicine.²⁵

²⁰ Ibid., p. 1.

²¹ Ibid., p. 2.

²² ARCP, AP, Minutes Volume 1 MS 2428, 23 May 1907, p. 1.

²³ Ibid.

²⁴ Ibid., p. 2.

²⁵ Hunting, *The History of the Royal Society of Medicine*.

Together the Royal Society of Medicine and the Association of Physicians formed two faces of a Janus-like medical generalist. The Royal Society of Medicine created an implicit outlet for specialist research while watchfully governing the structure of unified medicine. At the same time, the Association of Physicians provided a high-level national forum for physicians engaged in medical research to share their knowledge of internal medicine. Henry Head, for example, presented at the first meeting, and demonstrated how the spinal cord recombined sensory impulses from the surface of the body.²⁶ Since he presented this information to a general audience, few in the room must have deemed it information for nerve specialists only. That it was ‘specialised research’ seems self-evident now, but that should not imply that it was then perceived for specialists only.

The Association of Physicians can be considered elitist; its membership was determined by a subjective grade.²⁷ The idiomatic criteria entailed: ‘prepare an index, giving the name of the proposed member and his rating if proposed in previous years. Details of previous ratings (A+, A, B+, B, C, etc) are kept in a little alphabetically arranged book for the purpose.’²⁸ Although the *little book* is no longer available, it is clear that ‘the intention of the Association’ was ‘that no inactive Members should be allowed, that younger men in especial, should be brought into its ranks’.²⁹

²⁶ Ibid., p. 11.

²⁷ Ibid, p. 13 marked “Note on the History of the Association”.

²⁸ ARCP, AP, 2434/152b, Notes on Action to be taken during each year, p. 5.

²⁹ Ibid, 16

Even though membership was open for young physicians conducting research, membership clearly connoted privilege and power.³⁰ Most of the Association's members in 1907 had entries in *Who's Who*. Furthermore, perusal of their obituaries suggests they shared similar 'patrician' tastes in food, wine, music, and other cultivations appropriately tailored to middle-class values.³¹ The Association's members were influential in medicine and the politics of local communities, and they commanded the adulation of ambitious, young students. Such claims are obviously typical of the consultant class of physicians from this period, but unreservedly membership in the Association of Physicians further legitimised this status.

The Association was not overtly political. It was, for example, silent in 1911 on the issue of National Insurance, an unemployment relief scheme for working classes in the building, engineering, and shipbuilding industries. 'It was decided that to pass any resolution on the National Insurance Bill would be out-side the Rules of the Association.'³² While individual members might be patrician, paternalistic, or political, the Association did not officially debate national politics and legislation.

Initially the meetings of the Association of Physicians were on the surface non-descript, cordial affairs. Members presented their research, and then the audience discussed the

³⁰ The latter point was admitted later in this address. AP, 2427/64, Annual Dinner, Whitsuntide, 1952; AP Misc. notes etc. including Presidential Address by Dr Arthur Gurney Yates at Annual Dinner.

³¹ Christopher Lawrence, "Still Incommunicable: Clinical Holists and Medical Knowledge in Interwar Britain" in eds. Chris Lawrence and George Weisz, *Greater than the Parts, Holism in Biomedicine, 1920-1950*. (Oxford and New York; Oxford University Press: 1998), p. 96.

³² ARCP, AP, Minutes Volume 1 MS 2428, 9 June 1911, p. 70.

contribution. At the Annual Meeting in 1908, Edinburgh's Byrom Bramwell, describing a general medical condition, presented 'cases of Hodgkin disease combined with intense pressure, with pigmentation of the skin not due to arsenic, with a change in the character of the hair, and with absence of leucocytosis.'³³ At the Annual Meeting in Glasgow in 1912, Bramwell, this time presenting more seemingly specialist work, 'related the case of a man aged 34, a jockey, in whom he had carried out [sectioning] of the VII to X posterior dorsal nerve roots for the relief of gastric crises of great frequency and severity.'³⁴ Former members of the Neurological Society such as James Risien Russell (1863-1939) and James Taylor responded.³⁵

Following morning sessions, there would be a lunch, and then some demonstration or lecture, usually on pathology, but sometimes technological or historical.³⁶ For example: 'Dr Mellard shewed microscopic slides of the blood from his case of leukanaemia',³⁷ or 'The University Librarian shewed certain rare Medical Books from the Hunterian Collection.'³⁸ 'Professor J H Teacher (1869-1930) demonstrated William Hunter's Anatomical and Pathological Specimens.'³⁹ On one occasion there was an 'extensive historical exhibition given by the Wellcome Historical and Medical Museum.'⁴⁰ In the evening, the throng would gather for a dinner and smoker.

³³ ARCP, AP, Minutes Volume 1 MS 2428, 23 May 1907, p. 32.

³⁴ ARCP, AP, Minutes Volume 1 MS 2428, 18 April 1912, p. 81.

³⁵ Ibid., 82.

³⁶ For example: Ibid., pp. 84, 115.

³⁷ Ibid., 6.

³⁸ Ibid., 84.

³⁹ Ibid.

⁴⁰ Ibid., 329.

Since habitual attendance at meetings was mandated by the Association's rules, it seems likely that the social element became increasingly significant as the presentations became more specialised, which they visibly did just before the First World War.⁴¹ Papers relating to neurological subjects began to receive fewer questions from general physicians.⁴² Similarly, contributions on the circulation of the heart spawned limited interest as well.⁴³ In contrast, the Association's social aspects seem to have been more important; these meetings were a setting for London and provincial specialists, who otherwise rarely saw each other, to meet and discuss scientific and political developments in medicine.

While ideally, members of the Royal Society of Medicine could attend meetings of any Section at whim, enforced attendance at the Association of Physicians' meetings implied this and much more: it denoted distinctions in medicine and medical research, thus indicating acumen and aptitude, as well as 'respectability and social standing' within medicine.⁴⁴ Whereas the Royal Society of Medicine allowed its membership to attend what they wished, the Association of Physicians, by mandating attendance, presumed its members were interested regardless of the subject discussed. In retrospect, the existence and aims of both societies manifested a contradiction: the explicit anti-specialist origins of both organisations could not push back the reality that both were becoming venues for specialised conversations.

⁴¹ Rule 20, Association of Physicians of Great Britain and Ireland.

⁴² See, for example, ARCP, AP, Fred Batten, Minutes Volume 1 MS 2428, 20 March 1914, p. 110.

⁴³ ARCP, AP, Physiological Demonstration, Minutes Volume 1 MS 2428, 20 March 1914, p. 109.

⁴⁴ On creating the ornaments of respectability, see Keith Macdonald, "Building Respectability" *Sociology* Vol. 23, No. 1 (1989), pp. 55-80.

It is clear, though only with hindsight, that the Royal Society of Medicine was too London-centric and the Association of Physicians too exclusive. There were far too many provincial physicians not benefiting from the proceedings of either. These limitations may have stimulated interest in forming more inclusive, even specialist, societies. Any such suggestion, out-of-line with the original agendas governing both societies, required the right stimuli, and doubtlessly one was that the Association of Physicians did not hold a single meeting during the War. Its meetings resumed in 1919 at the urging of Sir William Osler, who warned that otherwise ‘we shall forget what we all look like’.⁴⁵

The Significance of Head-Wounds: Neurologic Practice in War, 1914-1918

Osler’s 1919 comment underscores how much medicine changed during the war.⁴⁶ While senior members of the Association of Physicians may have still believed in its original principles, the alleged virtues of medical generalism now seemed somewhat naive. The old elite, one historian has argued, failed to realise what experiences the younger generation internalised in the theatres of war.⁴⁷ That is not surprising: British medicine’s leaders were men whose professional, political, and social lives were well-advanced before the war began. Indeed some endeavoured to return their culture back to 1914; their attitudes, prejudices, appreciations and perceptions reflected desires for all that had been normal in late-Victorian or Edwardian Britain. Such nostalgia, though impractical given the new cultural climate, was not a surprising reaction to the supposed new cultural

⁴⁵ ARCP, AP, 2427/64, Annual Dinner, Whitsuntide, 1952.

⁴⁶ Ian Whitehead, “The British Medical Officer on the Western Front: the training of Doctors for War”, in *Medicine and Modern Warfare*, pp. 173-175.

⁴⁷ Modris Eksteins, *Rites of Spring: The Great War and the Birth of the Modern Age* (London: Bantam Press, 1989).

vulgarity represented by artists like James Joyce (1882-1941), who were hailing a modern world that had lost its faith in ‘orthodox religious, national, social and ethical doctrines’.⁴⁸ If, as Modris Eksteins has pointed out, the whole point of the War for Germans had been ‘the overthrow of the old structures’, then this British conservatism was an unsurprising response, but one that was short-lived.⁴⁹ Expressing such commonly-held frustrations to his soon to be wife, Charles Symonds, then medical officer in France but later Consultant Physician in Nervous Diseases to Guy’s Hospital, wrote that from reading the London newspapers it was possible to see instantly how many ‘stupid and pompous old buffers’ there were back home.⁵⁰

Many young physicians, like Symonds, saw opposition to medical specialties by older members of the establishment as rather calculated. It sometimes appeared no more than a cost-saving convenience benefiting the government’s coffers. Francis Walshe, newly home from Egypt in 1919, was outraged when he learned that the War Office was refusing him a demobilisation bonus as a medical specialist in neurology, even though he had been commissioned originally as a ‘specialist in nervous diseases.’⁵¹ The War Office recanted its position eventually: ‘in view of the fact that your original offer of employment was as “specialist in treatment of nervous diseases” it has been decided to

⁴⁸ James Joyce, *Ulysses* (London: Penguin Books, 2000), p. 777.

⁴⁹ Eksteins, *Rites of Spring*, p. 169. Likewise, see Mark Mazower, *Dark Continent: Europe’s Twentieth Century* (Penguin Books, 1998), pp. 111-117.

⁵⁰ Special Collections, Brotherton Library, University of Leeds, Charles Symonds to Janet Poulton, 1 December 1917.

⁵¹ University College London (hereafter UCL) Special Archives and Collections (hereafter cited as Francis Walshe Papers), Director General to Walshe, 31 August 1915; War Office to Walshe, 20 June 1919, folder A4, Francis Walshe Papers, MS ADD 301.

sanction the extra 2/6d per day, although *Neurology* is not one of the subjects in which specialist appointments are usually made.’⁵² Walshe’s view of this decision was derisive. To him their prior reticence had seemed too motivated by a rather convenient fiscal policy; nothing in the government’s acquiescence suggested to Walshe more than mere tokenism.

While many younger physicians like Walshe maintained sympathies with the traditional, conservative hierarchy of British medicine, it was also true that the conditions of the war had encouraged them to adopt specialist attitudes.⁵³ With, as Helen Jones has pointed out, forty-percent of those in uniform becoming casualties during the war, adopting an efficient field service was an absolute necessity – especially in France – and the organisation of patients by specialty was one practical mechanism for coping with the numbers of wounded.⁵⁴ These conditions of war created divisions of medical labour in Britain: the economy of wounded bodies became a mass production economy of specialised bodies.⁵⁵ The soldier with peripheral nerve injuries, head wounds, or organic and functional nervous diseases was but one instance.⁵⁶

The number of physicians actually commissioned as *specialists in nervous diseases* is unknown, although it should be assumed there were very few; most physicians were serving as general medical officers.⁵⁷ For example, James Purves Stewart, author of *Diagnoses of Nervous Diseases*, completed changes for the fourth edition of this book while stationed in Malta and practicing as Consulting Physician with the rank of Captain.

⁵² My emphasis. UCL, Francis Walshe Papers, War Office to Walshe, 22nd September 1919, folder A4.

His autobiography records almost no incidences of his treating nervous conditions in the field, and he seems to have performed in a general capacity.⁵⁸

Likewise, the number of neurologically wounded created by the war is a difficult question. The Neurological Society of Paris noted that all physicians had acquired ‘extensive experience of the nervous lesions caused by war.’⁵⁹ Yet, military statistics on the number of wounded with neurological injuries are unclear in estimating the number of such casualties.⁶⁰ Surveying 1,043,653 wounded soldiers, these ‘official statistics’

⁵³ For the effects of the First World War on medicine, see Andrew Hull and Johanna Geyer-Kordesch, *The Shaping of the Medical Profession*. (London and Rio Grande: Hambledon Press, 1999), pp. 78-82.

⁵⁴ Helen Jones, *Health and Society in Twentieth Century Britain* (London and New York: Longman, 1994), p. 50.

⁵⁵ D’Arcy Power, “St. Bartholomew’s and the War, 1914-1919” *St. Bartholomew’s Hospital Reports* Vol. LIII (1920), p. 12; Owen Richards, “The Development of Casualty Clearing Stations”, *Guy’s Hospital Reports* Vol. LXX (1922), pp. 121-122; Roger Cooter and Steve Sturdy, “Of War, Medicine, and Modernity: Introduction”, p. 2.

⁵⁶ Weisz notes that it had a similar effect on cardiology, orthopaedics, and psychiatry. *Divide and Conquer*, p. xxxviii; also see, “The Medical Call-Up, War Committees and the New Situation, Need of Doctor Economy,” *Times* (London), 24 April 1917, p. 3.

⁵⁷ Ben Shephard, *A War of Nerves: Soldiers and Psychiatrists, 1914-1994* (London: Pimlico, 2002), p. 17. How medical practice was organised in the field was probably different from how it was treated administratively. See Appendix C, Chart C19, for the number in my prosopography known to have served.

⁵⁸ James Purves Stewart, *Sands of Time, Recollections of a Physician in Peace and War*, (London: Hutchinson & Co. Ltd, 1939), pp. 115-215.

⁵⁹ “The Neurology of War”, *BMJ*, 14 August 1915, p. 264; Weisz notes that in France the First World War “increased the visibility and power of specialties” and the “Military Health Service, for instance, set up a special commission to supervise the treatment of nervous and mental diseases among soldiers and to oversee the neurology and psychiatry centres that were set up.” *Divide and Conquer*, p. 151, also see pp. 165-167.

⁶⁰ Indeed, Pressman argued that this ambiguity in American led to a merger between psychiatry and neurology, which when combined with Adolf Meyer’s socio-psychobiological theories created neuropsychiatry. Jack Pressman, *Last Resort*, pp. 20-28.

record that between 1916 and 1920: the number treated for epilepsy (mainly caused by shrapnel and bullet wounds) was 2,652; for organic nervous diseases, 1,020; for diseases of the spine, 304; and finally for head wounds 34,313.⁶¹ All of these injuries occurred mainly in France and Egypt.⁶² Statistics on functional nervous diseases are equally murky. Many soldiers suffered from neurasthenia; the estimate from these statistics is 21,549.⁶³ Yet according to Mitchell and Smith, the authors of the statistics, there was 'unfortunately little information regarding the wastage due to disorders in France other than that for the period of August to December 1914 and for 1915.' Data from 1916 through 1918 was simply incomplete.⁶⁴ They added:

The classification of wounds and diseases used [in the study] was introduced in 1920; before that date certain conditions, now separated, were combined for statistical purposes. When this change affects the main conclusions reached from the totals, the authors made an appropriate note. Certain classes are still wide and lack precise definition as, for example, neurasthenia, which comprises all functional diseases of the nervous system.⁶⁵

These retrospective statistics do not communicate the immediacy of the problems caused by the war. It was not the numbers of wounded soldiers only that made rationalisation of field medical services necessary; it was also the speed with which casualties were

⁶¹ T. J. Mitchell and G. M. Smith, *History of the Great War, Based on Official Documents: Medical Services, Casualties and Medical Statistics of the Great War* (London: His Majesty's Stationary Office, 1931), pp. 285-286.

⁶² *Ibid.*, 280.

⁶³ *Ibid.*, 288.

⁶⁴ *Ibid.*, 115.

⁶⁵ It is noteworthy that they did not provide the actual classification scheme. *Ibid.*, 328.

created. During the Somme advance there were a million allied casualties with 420,000 British dead, perhaps, as Hobsbawm noted, '60,000 on the first day [1 July 1916]' alone.⁶⁶ For a crisis of this scale, divisions of medical labour were the most expeditious means of organising treatment.⁶⁷ Rational organisation moved the wounded from the field to special centres where physicians increasingly care for specific types of injuries. By creating these specialised centres, doctors probably developed practical experience of specific wound types. Their mistakes may have developed deeper intuition about which patients would die and which they could save, and which patients could return to service or should be sent home. Though unemotionally pragmatic, such a system undoubtedly saved lives that might otherwise have succumbed to the arbitrary logics of field triage. More to the point under discussion, the numbers of wounded and the speed with which war created them, legitimised medical divisions of labour in a profoundly new way.⁶⁸

The decorated veteran, William John Adie, for example, initially served in the 1st Northamptonshire Regiment as its medical officer.⁶⁹ When the Germans destroyed his

⁶⁶ Eric Hobsbawm, *Age of Extremes: The Short Twentieth Century, 1914-1991* (London: Michael Joseph, 1994), p. 25; Ronald Blythe, *The Age of Illusion: England in the Twenties and Thirties, 1919-40* (Middlesex: Penguin, 1963), p. 11.

⁶⁷ Part of this re-organisation of field medicine occurred because of novel disciplinary rhetoric being deployed by a small vocal group of proponents for medical specialization. Couplets of war, i.e. war and increased specialization, or war and epidemics, are always difficult to locate. The view taken here is that the widely held belief that specialised medicine was encouraged by the conditions of the war is uncritical. On similar issues see, Roger Cooter, "Or War and Epidemics: Unnatural Couplings, Problematic Conceptions" *SHM*, Vol. 16, No. 2 (2003), pp. 283-302.

⁶⁸ This was especially true in the American context. Theodore Weisenburg, "The Military History of the American Neurological Association" *Archives of Neurology and Psychiatry* Vol. 1, No. 1 (1919), p. 2.

⁶⁹ "W. J. Adie" *Times* (London), 20 March 1935, p. 16.

regiment in the retreat from Mons, Adie transferred to the Leicestershire Regiment as a Medical Officer.⁷⁰ They too were decimated, and he was 'later given medical charge of the 7th General Hospital, also acting as consultant to the 2nd Army centre for head wounds.'⁷¹ In the head wounds clinic he apparently collected 'valuable neurological material' that he never published.⁷² Adie's path into the head injuries clinic was therefore circuitous, but once there he established himself as a specialist in nervous diseases, although it is uncertain whether he achieved recognised military status in the specialty.⁷³

Practice in France: An Examination of Gordon Holmes's Research, Patients, and Legacy

Most of the available information surrounding the activities of specialists in nervous diseases during the war pertains to Gordon Morgan Holmes.⁷⁴ It is interesting to contemplate why these sources exist, as well as to wonder why he was so routinely celebrated in retrospect. In many ways, Holmes was not representative. While most of his later contemporaries in neurology worked as general physicians in field hospitals in various war theatres or domestic hospitals in Britain, Holmes's practice and research mainly concerned soldiers with head, spinal and peripheral nerve injuries. His research on these patients was later renowned as a major contribution to clinical neurophysiology. Yet, because Holmes was not representative, his wartime service and research seemingly

⁷⁰ Macdonald Critchley, "1886-1935 William J. Adie" in *The Ventricle of Memory: Personal Recollections of Some Neurologists* (New York: Raven Press, 1990), p. 3-4.

⁷¹ "William John Adie, M.D.Ed., F.R.C.P." *BMJ*, 23 March 1935, pp. 624-625.

⁷² "William John Adie, M.D. Edin., F.R.C.P. Lond." *The Lancet*, 23 March 1935, p. 717.

⁷³ Cf. Haymaker, "William John Adie, 1886-1935", p. 231.

⁷⁴ On Holmes see: "Gordon Morgan Holmes" *The Lancet*, 8 January 1966, p. 101; Wilder Penfield, "Holmes, Sir Gordon Morgan (1876-1965), neurologist" *Oxford Dictionary of National Biography* (Oxford University Press, 2004).

created continuity between the older medical culture that had embraced generalist values and the new emergent culture of specialised medical practice. For these reasons, an examination of Holmes's practice in France reveals how a legacy of work and research on patients with nerve injuries were part of the later conditions by which clinical neurology emerged. Those conditions materialized mainly within public discussion about the difference between visible nerve injuries and the psychic injuries that manifesting as 'shell shock', and the implications these distinctions had for the social welfare of those who had suffered. In the end, it was Holmes's practice and its logic that epitomised the solution adopted by the State, simultaneously legitimating and breathing life into the specialty of neurology.

Holmes came to France circuitously. Because he suffered from myopia, the British services had initially rejected him, and British Red Cross commissioned him instead as a Surgeon. He worked with them from the 30th September 1914 to the 5th of November 1914 at the wage of £1 per day.⁷⁵ That month was spent near Paris, where there were four Red Cross Hospitals served by only '10 Motor Lorries and 10 Motor Bicycles' but required nearly ten times that number to handle the casualties already 'trickling' in from the front.⁷⁶ By the 7th of October 1914, Holmes was in a unit with perhaps fifteen other surgeons and fifty nurses.⁷⁷ He remembered:

⁷⁵ British Red Cross Personal Communication with the Author, 23 July 2003, E/CAS/03/HP.

⁷⁶ British Red Cross Archive, Summary of Work for the Week Ending 30th September 1914.

⁷⁷ British Red Cross Archive, Summary of Work for the Week Ending 7th October 1914, British Red Cross Personal Communication with the Author, 23 July 2003.

I went to France in October 1914 and stayed there until America came into the War in April 1917. I had to deal with the nervous troubles of the men at the front. There were quite a lot of such cases. The strain of being in the trenches for long spells under heavy bombardment by the German guns, and seeing so many of their friends die, took a toll on their nervous system.⁷⁸

In November 1914, Holmes finally received a military commission to No. 13 General Hospital, a makeshift hospital in a former casino just south of Boulogne with approximately one thousand beds.⁷⁹ There he remained until his marriage in 1917. At No. 13, Holmes and Percy Sargent (1878-1933), a surgeon, saw countless cases of head-wounds and spinal injuries. Holmes' sphere of influence, however, went far beyond treating these injuries, and he became increasingly influential in dictating policy on soldiers suffering from psychiatric breakdown.⁸⁰ He appointed Charles Myers (1873-1946) as a 'specialist in nerve shock', and together they both began organising special treatment centres for functional neuroses.⁸¹ By October 1917, Myers had returned to Britain, in disgrace because of his belief that special psychoanalytical centres should be created near the field for cases of shell shock, and 'from then onwards the direction of all

⁷⁸ R J Minney, *The Two Pillars of Charing Cross: The Story of a Famous Hospital* (London: Cassell, 1967), pp. 174-175.

⁷⁹ Michael Bliss, *Harvey Cushing: A Life in Surgery*, (Oxford: Oxford University Press), p. 292.

⁸⁰ A D Macleod, "Shell shock, Gordon Holmes and the Great War" *JRSM*, Vol. 97, (2004), pp. 86-89.

⁸¹ W. G. MacPherson, W. P. Herringham, T. R. Elliot, and A Balfour, *History of the Great War, Based on Official Documents: Medical Services, Diseases of the War*, Vol. 2 of 4 *Including the Medical Aspects of Aviation and Gas Warfare, and Gas Poisoning in Tanks and Mines*, (London, HMSO, 1923), p. 10.

the army centres was in the hands of Lieut.-Colonel Gordon Holmes' until he requested transfer home.⁸²

Very few of Holmes' notes have survived the war. Those that have include fifty-seven handwritten entries describing soldiers with spinal injuries and include basic information like the date the wound was received, the regiment of the soldier, and the area of the spine affected.⁸³ Though they are a startling history of the survival rate for paraplegic and quadriplegic soldiers, they are only modestly illuminating about Holmes's practice in France. Notes like these undoubtedly formed the basis of his papers and lectures from this period, many now considered classics of neurology.⁸⁴ His Goulstonian lecture in 1915 was on spinal cord injuries, his Montgomery lectures in 1919 were on disturbances of visions caused by bullet and shrapnel wounds, and his Croonian lecture in 1923 was on injuries to the cerebellum. For Holmes, as he would later explain, these injuries always indicated ways 'the normal functions of the nervous system' could be understood. This information could be used to 'arm ourselves and our successors with knowledge, which is

⁸² Ibid, 10; 'Dr. C S Myers' Times (London) 14 October 1946, p. 7. For a discussion of Myer's 'fall from grace' and Holmes' involvement see, Shephard, *War of Nerves*, pp. 46-51.

⁸³ Box: Gordon Holmes, undated notes; Rockefeller Medical Library, Institute of Neurology, National Hospital, Queen Square.

⁸⁴ Gordon Holmes, "The symptoms of acute cerebellar injuries from gunshot wounds" *Brain* Vol. 40 (1917), pp. 461-535; idem, "Disturbances of Spatial Orientation and Visual Attention, with Loss of Stereoscopic Vision" *Archives of Neurology and Psychiatry* Vol. 1, No. 4 (1919), pp. 385-407; Gordon Holmes and W Lister, "Disturbances of vision from cerebral lesions with special reference to the cortical representation of the macula" *Brain* Vol. 39 (1917), pp. 34-73; see also, F. E. Lepore "Harvey Cushing, Gordon Holmes, and the neurological lessons of World War I" *Archives of Neurology* Vol. 51(1994), pp. 711-722.

always the most potent instrument at our service in our lifelong contest with illness and suffering.’⁸⁵

Holmes’s tenure in France exerted a lasting and profound impact on his professional outlook. He became dogmatically opposed to Freudian psychoanalysis in the treatment of shell shock, suggesting to the young British-born, American-based nerve specialist Foster Kennedy (1884-1952) that he ‘go back...to America...and see to it that the care of functional and organic cases there be put on the right basis – which basis is almost anything, rather than Freudian’.⁸⁶ Holmes and his younger associate, William Johnson, preferred moral management and disciplinary methods for treating psychological conditions, and both tended to consider the causes of the disease to be defective morale rather than an acute psychic injury.⁸⁷

The American neurosurgeon, Harvey Cushing, published a diary of his experiences during the war that provides further glimpses into Holmes’s practice in France. In May 1915, Cushing observed a number of ‘amazing’ cases of head wounds and spinal injuries on a visit to Gordon Holmes at No. 13, and he estimated that, ‘with the proper backing these two men [Gordon Holmes and Percy Sargent] have an unparalleled opportunity, not only to be of service to the individual wounded, but, when this is all over, to make a

⁸⁵ Gordon Holmes, “Foundation Lecture” p. 7.

⁸⁶ F. Kennedy to I. Kennedy, October 1916 [Letter 43] in Isabel Kennedy Butterfield ed. *The Making of a Neurologist. The Letters of Foster Kennedy M.D. F.R.S. Edin. 1884-1952 to his Wife.* (Hertfordshire: Stellar Press Hatfield, 1981), p. 60.

⁸⁷ Ben Shephard, “Shell-Shock on the Somme” *Royal United Services Institute Journal* Vol. 141, No. 3 (1996): 51-56, 52-53; for a discussion of disciplinary practices see: Showalter, *The Female Malady*, pp. 175-180.

contribution to physiology, neurology, and surgery which will be epochal.’⁸⁸ For Cushing and many other Americans, the British neurological experience exemplified by Holmes’ practice was profound, and many young aspiring nerve specialists like Foster Kennedy, were driven by ambition to be involved in the project.⁸⁹ The war, everyone admitted, would establish future medical careers, even as it was destroying an entire generation.

This study of Holmes reveals experiences that *specialists in nervous diseases* might have had in the field. Nonetheless, putting that knowledge and skill to use back in Britain was difficult, since the lack of an organised neurological service there was felt at the time to create substantial problems in the organisation of medical care for nerve casualties.⁹⁰ Cushing remarked in his diary that ‘the Neurological [British] Home Service is all at cross-purposes with patients scattered at Tooting, King George’s, Queen Square, Maida Vale, the London, and 200 incurables at the Star and Garter, Richmond.’⁹¹ There were also theoretical differences, and these mirrored the institutional circumstances in neurological, psychological, psychiatric, and general medical organisation for patients with injuries of the nervous system.⁹² Cushing described, ‘Dinner with several neurologists and neurosurgeons, among whom there was little agreement about heads,

⁸⁸ Harvey Cushing, *From A Surgeon’s Journal: 1915-1918* (Boston: Little, Brown and Co., 1936), p. 57.

⁸⁹ F. Kennedy to I. Kennedy, September 1916 [Letter 42] in Isabel Kennedy Butterfield ed. *The Making of a Neurologist*, p. 59; Cushing to Holmes, 24 May 1915, Holmes, Gordon. 1915-1936, The Harvey Williams Cushing Papers in the Yale University Library. Manuscripts and Archives, Yale University Library. Microfilms Series I, Box 36, 704, Microfilm Reel 30.

⁹⁰ The situation began to be remedied in 1918 by a course of lectures offered by Francis Mott. These had the effect, however, of training general practitioners rather than neurologists. See, “Post-Graduate Teaching in Neurology” *BMJ*, 25 May 1918, p. 597.

⁹¹ Harvey Cushing, *From A Surgeon’s Journal: 1915-1918*, p. 357.

⁹² On this point, see Rose, *The Psychological Complex*, pp. 180-187.

spines, and peripheral nerves – except that there is an immense lot of work to be done on the incompletely treated cases which gravitate over here from France.’⁹³

Disagreements were not merely theoretical problems for nerve specialists; they reflected and paralleled an increasingly incoherent homeland service for nervous patients. The institutional provision for wounded soldiers was beginning to assume the shape of a political wedge. On one side were cases of visible injuries requiring long-term if not permanent management. Head wounds and spinal injuries were permanent visible scars of the atrocities of war. In contrast, despite the pleas of a compassionate public, neurologists like Holmes could muster only slight sympathy for victims of shell shock. That juxtaposition would frame future neurological views of functional and organic nervous diseases.⁹⁴ The fissure between psychiatric and neurological knowledge appearing in the interwar period could be reduced to debates about whether visible head-wounds were equivalent to invisible injuries of the mind.⁹⁵ Holmes entertained no doubts at all; for him conditions of the mind were failures of character and signs of hereditary degeneracy.⁹⁶

⁹³ Harvey Cushing, *From A Surgeon's Journal: 1915-1918*, p. 357.

⁹⁴ See Rose, *The Psychological Complex*, pp. 180-187.

⁹⁵ Andrew Abbott has noted that in America in 1920, neurologists and psychiatrists were bound together based upon a loose agreement on this very point. It did not last long, and shortly thereafter, psychiatrists separated. The agreement never existed in Britain. Abbott, *The System of Professions*, p. 300.

⁹⁶ Macdonald Critchley, “Gordon Holmes: The Man and the Neurologist” in *The Divine Banquet of the Brain and other Essays* (New York: Raven Press, 1979), pp. 228-234. Shephard, *War of Nerves*, pp. 49.

The Legacy of Head-wounds for Neurologic Practice, 1918-1923

Alone this picture of the wartime specialist in nervous diseases cannot justify the claim that the frontline provided clinical neurology with new professional autonomy while prompting a general shift in collective perspective about the role of these specialists. Other social, cultural, and political conditions must be considered. Total war, Marwick notes, had trickled into almost all corners of public, private, and commercial life.⁹⁷ In no profession was this truer than medicine in the years during, and then following the war. The returning wounded, many now incapacitated for life, saw their economic future and health as problems for the State to solve.⁹⁸ An increasingly important role for government became standard: individuals, and families, required assistance that only the Ministry of Pensions and the newly created Ministry of Health could provide.⁹⁹

One of the effects of this increasing role for the State was a further demand for medical specialists and specialist departments. All quarters needed this expertise: For instance, the public, empathising with the soldiers' traumatic experiences of the war, believed patients suffering from psychological problems deserved specialised treatment.¹⁰⁰ Likewise, the State was equally in need of experts. It was felt that specialists were the most competent

⁹⁷ Marwick, *A History of the British Isles, 1914-1999*, p. 55.

⁹⁸ Mazower, *Dark Continent*, p. 80.

⁹⁹ Richard Lovell remarking on the crisis, noted, for instance, that one problem was simply that, "In Britain, five million men had to be reabsorbed into civilian life". *Churchill's Doctor: A Biography of Lord Moran* (London: Royal Society of Medicine, 1992), p. 55.

¹⁰⁰ Peter Leese, *Shell Shock: Traumatic Neurosis and the British Soldiers of the First World War*, (Palgrave Macmillan, 2002), pp. 2-4

physicians for assessing full or partial disability, and they could spot malingers exploiting public good will.¹⁰¹

These circumstances created a new economy for medical specialists. In the post-war period, those specialists, like others in emergent specialties, became a permanent fixture of British society. Orthopaedics, neurology, and neurosurgery in particular were specialties benefiting from this new status in Britain.¹⁰² While an American author could bemoan the fact that ‘war neuroses were essentially problems of neurology, and neurologists as a whole had very little to do with the attempt at the solution,’ specialists in nervous diseases in Britain, by contrast, were spearheading efforts on these conditions.¹⁰³ Treatment and the provision of care for soldiers with peripheral and spinal cord injuries, for instance, created opportunities that had not existed before, while orthopaedic surgeons and neurologists claimed to be adept at handling paraplegic or quadriplegic patients.¹⁰⁴ Sometimes neurologists found somatic injuries had not damaged the nervous system; what appeared at first to be somatic paralysis turned out to be neurasthenic or hysterical symptoms. As Foster Kennedy remarked earlier, ‘the neurosis

¹⁰¹ W. G. MacPherson, W. P. Herringham, T. R. Elliott, and A. Balfour, *History of the Great War, Based on Official Documents: Medical Services, Diseases of the War*, pp. 40, 43-44.

¹⁰² For orthopaedics, see: Roger Cooter, *Surgery and Society in Peace and War*; for neurosurgery see: G J Fraenkel, *Hugh Cairns: First Nuffield Professor of Surgery University of Oxford*, (Oxford: Oxford University Press, 2003).

¹⁰³ Sidney Schwab, “The Neurologic Dilemma” *Archives of Neurology and Psychiatry*, Vol. 6, No. 3 (1921), p. 255.

¹⁰⁴ John Russell Silver, *History of the treatment of Spinal Injuries*, (New York: Kluwer Academic/Plenum Publishers, 2003), p. 17-56; A similar case has been made for cardiology. See Anne Hardy, *Health and Medicine*, p. 68.

of war is intrinsically Hysteria'.¹⁰⁵ If this were true, such a differential diagnosis was possible by rigorous neurological examination only.

Historians often overlook the growing political significance of neurological knowledge following the War, and even the secondary literature on shell shock usually casts the condition as mainly germane to the history of psychiatry.¹⁰⁶ Yet, there were broader theoretical stakes in this issue for neurology than is typically realised. On one hand, if psychological trauma manifesting as shell shock had organic components, then the implication was that mind and body were united. On the other hand, since no physical features were ever observed – that is, since pathological, biochemical, or physiological research never revealed lesions correlating with aberrant behaviour – then it was felt that diseases of the mind could only nominally be connected to conditions of the body. Unlike the shocking head wounds specialists in nervous diseases encountered in the field, psychological injuries struggled to achieve similar legitimate corporeality in medicine. Pathologies of the mind were simply not holes in the head. The realist logic of neurologic practice mandated if unseen then unproven. It was easy therefore to explain psychological trauma as an inherited degeneracy, a failure of moral character, or

¹⁰⁵ F. Kennedy to I. Kennedy, 17 June 1917 [Letter 45] in Isabel Kennedy Butterfield ed. *The Making of a Neurologist*, p. 59.

¹⁰⁶ Exceptions include a study focusing on French neurologists by Marc Roudebush, 'A Battle of Nerves: Hysteria and Its Treatment in France During World War I' in Mark S Micale and Paul Lerner, *Traumatic Pasts: History, Psychiatry, and Trauma in the Modern Age, 1870-1930* (Cambridge: Cambridge University Press, 2001), pp. 253-279. Also see comments in Ben Shepherd, *A War of Nerves: Soldiers and Psychiatrists, 1914-1994*.

malingering.¹⁰⁷ A letter from Walshe to his military command officer fittingly testifies to the archetype: 'I am strongly of opinion that although a neurotic individual of poor morale and most unwilling to work, he is fit for his duties as clerk....' He added grudgingly, 'It becomes very difficult to deal with men of defective morale when Medical Officers are in such a hurry to pronounce them unfit for service.'¹⁰⁸ To interpret neuroticism, poor morale, and an unwillingness to work under the umbrella of simple 'defective' was the conservative counterpoint to the sweeping and more radically individualist claims of the psychoanalytic movement.¹⁰⁹ Burgeoning psychological knowledge, epitomised by the work of Freud, had been expanding into unknown territories, seemingly challenging the mores of Victorian and Edwardian medical thought.¹¹⁰ Like clinical neurology, professional psychiatry and psychology began to emerge institutionally in this period, and their success with the Freudian model meant that even interwar neurologists briefly toyed with psychoanalytic therapy.¹¹¹

¹⁰⁷ The degenerative aspect of shell shock has also been explored to the nth degree and would warrant a bibliography. See Oppenheim, *Shattered Nerves*, pp. 141-180 for basic information; also see Showalter, *The Female Malady*, pp. 167-197; alternatively see Pat Barker's regeneration trilogy for a fictional though enjoyable account.

¹⁰⁸ UCL, Francis Walshe Papers, Walshe to Command, [undated, c 23 November 1918] folder A4.

¹⁰⁹ A most explicit statement of one neurologist's prejudices appeared in a 1911 meeting of the Section of Neurology. See Frederick Mott, "Presidential Address: The Inborn Factors of Nervous and Mental Disease" *PRSM* Vol. 5, No. 2 (1911), pp. 1-30. "Every neurologist recognises the importance of the inborn factor in the production of neuroses and psychoses, and in certain degenerative conditions of the nervous system, which Gowers has designated under the collective term abiotrophies." p. 1. Later he wrote, "It has always struck me that Jews were, on account of their neurotic temperament, more liable to insanity than Christians." p. 29.

¹¹⁰ See, for example, the criticism against Freud's methods in Arthur Hurst, "Psycho=analysis and War Neuroses" *Guy's Hospital Gazette* Vol. 31 (1917), pp. 308-309.

¹¹¹ Edward Shorter, *A History of Psychiatry: From the Era of the Asylum to the Age of Prozac*; (New York, John Wiley; 1997) see p. 42, and footnote 13.

Unsurprisingly, somatic versus psychological perspectives found favour in different political quarters.¹¹² Political conservatives saw the stoic British character as the normative standard and appropriate bearing of every man, especially a former soldier. For them neurological knowledge contested the legitimacy of psychological diseases like shell shock and they depicted pensions for such cases as evil tools binding free individuals to dependency upon the State for perpetuity. Political leftists, though not overly receptive to Freudian ideas, were not prepared to so disavow the psychological trauma war had visited upon the minds of soldiers.¹¹³

Both positions appeared in the *Report of the War Office Committee on Shell Shock*, which was published in 1922. The Report's Committee interviewed a number of specialists in nervous diseases, many who had worked in the head injury centres of France and were by then regarded as authorities in neurology. The Report referred to these authorities as 'consultant neurologists', despite the fact that that title had not been available routinely in the field.¹¹⁴ Most interviewees asserted that shell shock, though it might exist, was reified: William Johnson stated that 'so-called 'Shell Shock' consisted of a motley of conditions.'¹¹⁵ Although a few specialists, like William John Adie, were prepared to claim physical concussion caused it, clinical research had not found physical lesions or

¹¹² Leese, *Shell Shock*, pp. 141-154.

¹¹³ Ted Bogacz, "War Neurosis and Cultural Change in England, 1914-22: The Work of the War Office Committee of Enquiry into 'Shell Shock'" *Journal of Contemporary History*, Vol. 24, No. 2 (1989), pp. 227-256. Shephard, *A War of Nerves*, p. 152.

¹¹⁴ *Report of the War Office Committee of Enquiry into "Shell-Shock"* (HSMO, 1922), pp. 4-6.

¹¹⁵ *Ibid.*, 81.

somatic features of the disease, despite extensive investigation.¹¹⁶ Many thought that the dominant feature of the disease was an underlying desire to be removed from the continual hazards of the trenches, and that as the disease came to be adopted in the popular vernacular, it also came to seem inevitable.¹¹⁷ The self-fulfilling prophecy shell shock represented, they argued, stimulated normal emotional desires for removal from the stress, strain, and boredom of the trenches. Gordon Holmes insisted ‘the “will and wish” factor had considerable influence. [The troops] recognised they would escape further service in the line for the time being...the great increase in these cases coincided with the knowledge that such a condition as shell shock existed.’¹¹⁸ It was, nevertheless, difficult to determine whether the patient was malingering or traumatised. Arthur Hurst noted ‘that signs of genuine neurosis and simulation are identical and that simulation can only be diagnosed with certainty in very few cases’.¹¹⁹ All specialists agreed that the stress of the trenches could eventually break down military discipline and notions of duty, and they thought that most patients so affected simply required a hot meal and quiet bed for a few days. Holmes, especially, felt soldiers should never have been removed from the combat areas because the desire to survive created greater problems in military order:

It was recognised, and recognised rightly in his opinion ‘that during the Battle of the Somme a large number of men deserted from the line on the claim that they had ‘shell

¹¹⁶ Ibid., 17-18.

¹¹⁷ Ibid., 19-21, 23-28, 68-71, 74-75.

¹¹⁸ Ibid., 38-39.

¹¹⁹ Ibid., 24.

shock' and it was necessary to prevent that and to keep them within the Army area where they were still under the discipline of the Army.¹²⁰

Asked whether the breakdown in morale was unavoidable in conditions like those of the past war, most specialists declined to answer in the affirmative and hedged that at the best too 'little was known'.¹²¹

The Report benefited from the relativism of neurologic knowledge – all the interviewees agreed that traumatic experiences were real but exaggerated by public sympathy.¹²² Public concern had been raised initially by the alleged shooting of men who had disobeyed orders in the field. This the committee deemed was a repugnant action, because rather than punishing deserters, it might actually have meant killing mentally ill soldiers who had broken down under the stress of War.¹²³ The refusal of a soldier in the field to follow orders they deemed an ambiguous action requiring serious deliberation, including evaluation of his mental condition. Executing deserters, the committee estimated, was a morale breaking, possibly mutiny-causing activity, dangerous for recruitment. If the public believed that shell shock was inevitable when conditions were like those in the trenches, and if it was widely recognised by soldiers that exhibiting symptoms of shell shock might lead to execution, then a disincentive was being created to join the armed forces.¹²⁴ Likewise, the committee noted, another symptom appearing

¹²⁰ Ibid., 41.

¹²¹ Leese makes a similar point, see *Shell Shock*, pp. 159-168.

¹²² Ibid., 92-93.

¹²³ Ted Bogacz, "War Neurosis and Cultural Change in England, 1914-22", p. 228.

¹²⁴ *Report of the War Office Committee of Enquiry into "Shell-Shock"* (HSMO, 1922), pp. 160-189.

in officers suffering with the condition was risk-taking behaviour. Bravery was one thing, but an officer seeking his own death might lead his men to theirs, with dire consequences for an entire campaign. If officers believed symptoms of mental breakdown would lead to their execution anyway, they might attempt a desperate and suicidal act of bravery to try to free themselves from the conditions of war. That would be an untenable and chaotic behaviour in the discipline-requiring armed forces.

Nonetheless, the War Committee argued that it was difficult to distinguish soldiers actually suffering from shell shock from those who were faking.¹²⁵ The ‘triumph’ of neurological knowledge was that it had produced – or at least could claim to have produced – a scientific justification for not caving into the demands made by the psychological and psychiatric profession, some of whom were determined to see the condition as inevitable and thus everywhere.¹²⁶ Ted Bogadaz argued that the committee members constructed a half-way house in which Freudian ideas were refuted but simultaneously used to solve this problem: ‘In a sense the committee which had dismissed Freud may have unwittingly demonstrated how impossible it had become by the early 1920s to speak of mental illness without some recourse to his theories.’¹²⁷

¹²⁵ Ibid., 193.

¹²⁶ One *Lancet* editorial commented polemically after the report: ‘A change has come over neurology since the war; a war legacy which the pre-war neurologist might be pardoned for not, perhaps welcoming altogether without reserve....the study of functional nervous cases seems to be passing to some extent into the hands of a generation of self-styled “neurologists”, not a few of whom – it may be said without exaggeration and without offense – seem to act as though knowledge of the anatomy and physiology of the nervous system were immaterial, if not an actual hindrance.’ “The Future of Neurology”, *The Lancet* (1923), pp. 792-793. Pre-war neurology had never existed in the way the editorial’s author imagined.

¹²⁷ Ted Bogacz, “War Neurosis and Cultural Change in England, 1914-22”, p. 250.

Neurological knowledge, however, justified political pragmatism – and *vice versa*. The question was not whether the disease existed, but to what extent it did so, and could be proven the patient's condition.¹²⁸ The neurological answer, in contrast to the Freudian answer, offered a seemingly commonsense political expediency, which while not ignoring or de-legitimising the status of psychologically traumatised soldiers, also did not give them the benefit of the doubt as well.

This was the first time British neurologists demonstrated the political utility of their knowledge of the nervous system. It was a major triumph for the emergent specialty, still marginal in broader British medical culture. Of the Report's fifty-nine interviewees, fourteen were designated with a neurological status – though their actual professional status in the field was more complex than that suggested.¹²⁹ Even if British neurology had politically demonstrated the legitimacy of the organic aspect of its occupational knowledge, still to be tackled were broader barriers preventing the emergence of clinical neurology in hospitals and universities as a recognised and institutionally legitimated practice.¹³⁰ Only a continual campaign for professional autonomy would achieve that aim, though as we will see in the next chapter, external circumstances lay beneath many of that campaign's conditions. The War shifted social and political perspectives in favour of rational organisation, subsequently laying the foundations for neurology's transition from a general to a specialist practice.

¹²⁸ Leese, *Shell Shock*, p. 155.

¹²⁹ Thomas Graham Brown, for example, although he had held a position according to the Report as a 'neurologist' in the British Salonica Force, was Professor of Physiology in the University of Wales. *Report of the War Office Committee of Enquiry into "Shell-Shock"* (HSMO, 1922), p. 213.

¹³⁰ "Post-graduate Teaching in Neurology" *BMJ*, 25 May 1918, p. 597.

From General Practice to Special Practice

Neurology by 1918 was a special subject, and the men who practiced it were stringent in their ideals. These ideals supported the cause for unity in medicine and the expansive values of a neurology grounded in knowable facts, and practitioners therefore still integrated their interests in the nervous system properly into general medical practice. It is doubtful that British neurologists would have wholeheartedly campaigned for their specialty's autonomy without tremendous impetus. However, the appearance of a movement for a politically autonomous clinical neurology distinct from generalist practice really began in 1918. Nowhere was this clearer than in a meeting of the Royal Society of Medicine's Section of Neurology.

In his 1918 Presidential Address, Henry Head eloquently put the case for neurology's autonomy before the Section of Neurology. His speech, one of the most impassioned lectures the Section would hear in the interwar period, spoke of the place of neurology in the new world. His opening declaration 'to-night we hold the first meeting of this Section after the close of the greatest war in the history of the world' signified the solemnity of the picture he wished to convey.¹³¹ He portrayed the war as the causes and follies of old men and the devastation of youth: 'this victorious peace has been won by sacrifice of innumerable young lives; and for us older men the future must be dedicated to making the world a better place for those who are to take up our burden.'¹³² The gauntlet he thus threw was not to the younger generation. Head aimed his comments at members of the

¹³¹ Henry Head, "Presidential Address: Some Principles of Neurology" *PRSM* (1918), p. 1.

¹³² *Ibid.*

community who like Head were older than fifty. Younger men, he alleged, already rued the inadequacies of their elders.

The cataclysmic events of the last four years have shaken men's belief in the old order, and medicine has not escaped the universal demand for a restatement of current values. The young are looking to us to enunciate the principles on which our teaching is founded. They are not disposed to accept without criticism conventional explanations.¹³³

Yet, Head's message was upbeat. While he claimed little had happened in neurology during the last twenty-five years of his career, he prophesied a future period of intense questioning, research, and speculation. Neurology in the younger generation would pass beyond the creation of eponyms, a tendency Head criticised for being simple restatements of the same medical problem and subtle advertisement. Neurologists of the interwar period, in contrast, would frame disease in terms of function. Here Hughlings Jackson's theories on the evolution of nervous function could combine with Charles Sherrington's physiology. Because Sherrington had articulated principles of neurology more clearly than Jackson (note that Head was claiming physiological principles were principles of neurology), he had shown convincingly that Jackson's evolutionary principles of neurology merited collective attention.

Had we applied Jackson's law, that the functions of the nervous system are integrated on evolutionary principles, neurology would not have made so many excursions into the wilderness. He taught us that a lesion of the cerebral cortex caused disorder of movement,

¹³³ Ibid., p. 2.

not paralysis of the muscles. This lesson, however, was not applied to the other functions of the cortex.¹³⁴

Head argued for a new and refined scientific neurology. Jackson and Sherrington's principles of neurology, he suggested, were not merely theoretical fancies, but the essences of clinical practice. 'Clinical diagnosis is a by-product of scientific investigation.'¹³⁵ For a pinprick, touch of cotton wool, or olfactory test to acquire clinical meaning, a whole canon of underlying anatomical and physiological knowledge had to be written and disseminated to students and practitioners.

The charm of neurology, above all other branches of practical medicine, lies in the way it forces us into daily contact with principles. A knowledge of the structure and functions of the nervous system is necessary to explain the simplest phenomena of disease, and this can be only attained by thinking scientifically.¹³⁶

Head then articulated the underlying principles of clinical and scientific neurology: the most evolutionarily complex functions were the first to disappear; wherever a lesion appeared a correlative defective function would arise; a lesion could produce 'positive' effects by releasing otherwise restrained functions; the central nervous system had been slowly evolving; and finally, integration of nervous functions was always based upon a

¹³⁴ Ibid., pp. 7-8.

¹³⁵ Ibid., p. 8.

¹³⁶ Ibid.

struggle of expression ‘between competing physiological activities’.¹³⁷ He ended provocatively:

We neurologists are brought into daily contact with these diverse functional reactions. We work in the passage-way between the physical universe and the dwelling-place of the mind. We can watch the processes of evolution, visible in the actual behaviour of the central nervous system. We see the coming and the going, and we alone can record which of the many aspirants has conquered the right to enter or to leave that council chamber of human activities.¹³⁸

Certain features of Head’s address should be considered. His choice of title, ‘Some Principles of Neurology’ sounded programmatic and prescriptive. Significantly, one of the un-stated, implicit arguments of his talk was that a community of neurologists existed. Indeed, the last sentence of his lecture ‘We see the coming and the going, and we alone can record which of the many aspirants had conquered the right to enter or to leave that council chamber of human activities’ as well as his metaphor of the passageway between mind and brain, were protean. Both had a homogenising effect by creating the notion of a community. Such an appeal forced his audience to consider what they were and what their practice was professionally. Furthermore, Head had provided a programme: a neurologist ought to be concerned with establishing scientific principles, for it was in principles that the possibility of cures or palliatives would be found.

¹³⁷ Ibid., pp. 9-10.

¹³⁸ Ibid., pp. 11-12.

The dichotomies in Head's lecture were many: old versus young; medicine versus neurology; anatomy versus function; clinical practice versus scientific knowledge. In all cases, the latter proved more significant: youth, neurology, function, and scientific knowledge. These binaries were stark, because the actual conditions of neurology as Head was speaking were opposed to this new perspective. The conditions he saw were: old, medical, anatomical, and clinical, and all of these were superficial in relation to what Head foresaw coming in the future. This prescriptive was not for the younger generation of neurologists – medical officers just starting training posts as houseman or medical registrars. Instead, it was a stark warning to the older generation not to be obstructionist. Head was acknowledging how this younger generation would challenge the rules of the old, and was pleading that they were right to do so. Twenty-five years of his professional life, he argued, had seen few changes either politically or scientifically in neurology; the next twenty-five years would, because the criticisms of youth would come in all forms: a critique driven by changes in knowledge and causing radical social and political reforms throughout all of medicine. The passageway between mind and body signified a no-man's land between opposing medical and scientific trenches. Youth was currently in neurological no-man's land; indeed youth had been forced there. Their response would move in all directions; it would be integrationist, possibly materialist, and revolutionary. The upheaval would result in the dissolution of mind and brain into unified principles of neurology. The transformation, when it came, would be an unprecedented revolution, which would eventually overrun old trenches and create a final lasting peace between functional and organic schools of thought. It would be better, Head was urging, not to fortify those trenches with the walls of the medical status quo; medical generalism, a

social contrivance for example, would be decimated by this attack. It was simply better to surrender and specialise.

Head's charge probably had a lasting resonance, but alone was nonetheless insufficient to force neurologists to transform their work socially and politically. However, there were small signs of change in the early 1920s. In 1919, the Hughlings Jackson Lecture revived, having not been delivered since William Gower's 1909 oratory on 'Special Sense Discharges in Organic Disease'.¹³⁹ At the same time Henry Head proposed that the Section of Neurology join an 'international association of neurologists'.¹⁴⁰ In 1920, a 'national union of neurologists' was apparently created, and the roll of members' names was enclosed in a letter to the council (see Chapter 6).¹⁴¹

The proceedings of the Neurological Section immediately following the War were also eventful. Papers presented in 1919 were almost all related to war injuries of the nervous system: William Aldren Turner's (1864-1945) Presidential Address, 'The Influence of Psychogenic Factors in Nervous Disease', was followed by many others that derived much of their content from investigations of wounded soldiers minds and bodies.¹⁴² Farquhar Buzzard presented multiple cases of spinal cord injuries caused by the war.¹⁴³

¹³⁹ RSMA, K73, Council Minutes, 18 December 1919, p. 158; William Gowers, "Special Sense Discharges in Organic Disease" *PRSM* Vol. 3, (1909), pp. 1-16.

¹⁴⁰ RSMA, K73, Council Minutes, 18 December 1919, p. 160.

¹⁴¹ Sadly this document has not been found. RSMA, K73, Council Minutes, 28 October 1920, p. 174.

¹⁴² W. Aldren Turner, "Presidential Address: The Influence of Psychogenic Factors in Nervous Disorders" *PRSM* Vol. 13, (1919), pp. 1-16.

¹⁴³ E Farquhar Buzzard, "Case of Spastic Quadriplegia following Injury of the Spinal Cord in the Upper Cervical Region, showing Certain Unusual Reflex Phenomenon", *Ibid*, pp. 44-47.

Alfred Carver presented a paper titled 'Some Biological Effects due to High Explosives'.¹⁴⁴ E G Fearnside offered his thoughts on the 'Essentials of Treatment of Soldiers and Discharged Soldiers suffering from Functional Diseases', while Henry Head explored the meaning of a case of 'Shell Wound of Head'.¹⁴⁵ Arthur Hurst elaborated upon 'The Hysterical Element in Organic Disease and Injury of the Nervous System'.¹⁴⁶ George Riddoch (1888-1947) outlined neurological complications arising from a bullet wound to the throat, while Percy Sargent dogmatically pondered 'Some Lessons of the War applied to Spinal Surgery'.¹⁴⁷ T A Ross (1875-1941) presented on the 'Certain Inter-relations of Peace and War Neuroses', while his colleague, R G Rows outlined his hypotheses on 'Anxiety States'.¹⁴⁸ Francis Walshe elected to use the approach of an epidemiologist and described the picture of 'Forms of Peripheral Neuritis among troops serving in the Egyptian Expeditionary Force, 1915-1919'.¹⁴⁹ The trend was the same in other British medical journals that year.¹⁵⁰

This out-pouring of research, as well as the new social changes appearing in British neurology, led the American Harvey Cushing to marvel at the 'very valuable

¹⁴⁴ Alfred Carver, *Ibid.*, pp. 26-51.

¹⁴⁵ E G Fearnside, *Ibid.*, pp. 42-48; Henry Head, "Shell Wound of Head, Right Temporal Region...", *Ibid.*, p. 53.

¹⁴⁶ Arthur Hurst, *Ibid.*, pp. 21-29.

¹⁴⁷ George Riddoch, "Case of Meningitis Circumscripta Serosa following Bullet Wound of the Neck", *Ibid.*, pp. 40-42; Percy Sargent, *Ibid.*, pp. 17-27.

¹⁴⁸ T A Ross, *Ibid.*, pp. 13-20; R. G. Rows, *Ibid.*, pp. 61-66.

¹⁴⁹ Francis Walshe, *Ibid.*, pp. 49-60.

¹⁵⁰ For a discussion: "The Organic Aspect of Shell Shock" *JNP*, Vol. 2, Number 5 (1921), pp. 49-51.

contributions to neurology by Englishmen'.¹⁵¹ Slightly later, Edwin Bramwell could claim retrospectively that the War marked the end of an Age. He wrote that for neurology, 'the Great War constitutes a convenient if arbitrary dividing-line between the present and the past'.¹⁵²

If the war produced this rush of neurological papers in 1919, and caused the kind of doctrinal changes Bramwell's later comments signalled, then it made it possible for this emerging specialty to advise the government. This, as already has been described, proved especially important in the War Office's study of shell shock. Signs of the neurological position on this psychic condition were evident in the papers presented before the Section of Neurology, but expertise in neurological injuries and knowledge of the complications arising from somatic injuries were perceived as more important communications. Still, in an unprecedented move following one clinical meeting at the National Hospital, where only cases of war injuries were presented to an attending audience of thirty members and seven visitors, a resolution was passed that the President of the Section should approach the Ministry of Pensions. The Minute Book of the meetings of the neurological section recorded: 'That in view of the difficulties of estimating the severity of disability following injuries of the nervous system, the Director-General of Medical Services, Ministry of Pensions be approached by the President with the offer of assistance in the shape of a report from a Committee of the Neurological Section.'¹⁵³ If such a report was

¹⁵¹ 'Neurology in the War' *BMJ*, 13 December 1919, p. 790-791.

¹⁵² [Private Collection], Transcript 'Neurology', 25 April 1933.

¹⁵³ RSMA, K75, Minutes of the Royal Society of Medicine Neurological Section Meetings (hereafter, Section Minutes), 11 December 1919, p. 194.

written, then it has not been located. However, whether written or not, what is striking is this entry's existence: I believe this is the first recorded instance of British neurology attempting to advise the government based on its accumulated knowledge.

Accompanying the rise of the medical specialist in British society was an obvious increase in specialist research communications at the meetings of the Association of Physicians, which resumed in 1919. This was true also for neurological papers. At its 1920 meeting in Manchester, Donald Core reported 'A Psychical Response and its relation to certain Nervous Disorders' at which he presented a theory on 'terror neuroses', eagerly discussed by Arthur Hurst and David Drummond.¹⁵⁴ Edwin Bramwell reported two specialist case studies, one on 'Myotonia Atrophica' and another 'Case of Frontal Tumour with frequent fits of Jacksonian type.'¹⁵⁵ In 1921, among several neurologists presenting, was Gordon Holmes, who reported a case of, 'Tumour of Suprarenal Cortex in a Young Woman.'¹⁵⁶ This pattern continued throughout the 1920s – with specialist research reports becoming normative.

Conclusion

Neurology's emergence out of the War as an autonomous medical specialty should not be seen as strictly unique, matched, as it was, by the rise of other specialties in this period as well.¹⁵⁷ Where before physicians had claimed the full generalist title while admitting an

¹⁵⁴ ARCP, AP, Minutes Volume 1 MS 2428, 21 May 1920, p. 150.

¹⁵⁵ ARCP, AP, Minutes Volume 1 MS 2428, 21 May 1920, p. 153-155.

¹⁵⁶ ARCP, AP, Minutes Volume 1 MS 2428, 1 June 1921, p. 166.

¹⁵⁷ Francis Fraser, "The Rise of Specialism and Special Hospitals", p. 181.

interest in a special area, the interwar period, as will be examined in the next chapter, witnessed the appearance of many unapologetically fulltime specialists, and with them came a simultaneous process of institutionalisation, stimulated by funding from the Medical Research Council, the University Grants Committee, and philanthropy. Yet, it would be another generation before a fully autonomous specialty was recognised, and as we shall see in the next chapter, much of the reason that clinical neurology found this autonomy derived from efforts by the British Medical Research Council to stimulate neurological research.

It is clear that the War changed British medical culture's perspective about the necessity of specialization. Although it is doubtful that many physicians recognised it at the time, in retrospect it is clear that by 1920 the generalist ethos of the Royal Society of Medicine and the Association of Physicians had become antediluvian. The specialization of British medicine seemed an inevitable natural evolution; a sign of the progress and triumph to be sure, but also one indicative of the fragmentation and contingency of scientific practice in the modern age. Nonetheless, the specialization of medicine was perceived as part of a humanist enterprise, emancipating humankind from disease through the application of specialist science. Neurology like other medical specialties was entering a new age in which, in the contemporaneous words of Henry Sigerist, it was becoming a 'psychological adviser' to the State.¹⁵⁸ Politics and medicine were all the closer.

¹⁵⁸ Henry Sigerist "What Medicine has contributed to the Progress of Civilisation" in Milton Roemer ed. *Henry E Sigerist on the Sociology of Medicine* (New York: MD Publications, 1960), p. 377.

CHAPTER 5

Rules of Practice and the Origins of the MRC's Clinical Neurological Research Unit

‘A bluestocking?’¹

Introduction

Before the First World War, many physicians regarded the treatment of nervous diseases as a sign of status within general medical practice. Since they viewed the diverse mental and physical characteristics of nervous diseases as inseparable elements of underlying conditions affecting the whole body, however, they made little distinction between the factions of nerve specialists working within the hospital service. Consequently, as we have seen in previous chapters, the Neurological Section of the Royal Society of Medicine, as well as its antecedent in the Neurological Society of the United Kingdom, maintained broad definitions of neurological practice and knowledge, and mainly placed emphasis on neurology's connections to general medicine.

For many physicians before the War, their professional struggle was one between publicly demonstrating their scientific attainments and maintaining general proficiencies in practice.² The environments of voluntary and teaching hospital wards, as well as their

¹ A *derogatory* idiom, ‘bluestocking’ refers to highly educated and intellectual woman. The expression derives from the eighteenth century and refers to philosophical evening parties at which attending women would wear one, blue worsted stocking (an example of language's determinant properties).

² By far the most convincing explanation for this phenomenon generally is: Christopher Lawrence, “Still Incommunicable: Clinical Holists and Medical Knowledge in Interwar Britain”, in George Weisz and Chris Lawrence eds. *Great than the Parts, Holism in Biomedicine 1920-1950* (New York, Oxford, Oxford University Press, 1998), pp. 95-97. Also see Harry M. Marks, ““Until the Sun of Science...the true Apollo

private practices, demanded general competence. Additional symbolic capital came through cultivation of scientific expertise. Research publications and membership in scientific bodies brought not only admiration from peers and a broader range of clients, but also led to prestigious status within the medical establishment, such as presidencies of medical societies or administrative positions within teaching hospitals or the Royal College of Physicians.³ Invariably, visible attainments in scientific research differentiated the more successful consultants from their peers, and consequently many scholars have regarded these physicians as pioneers in specialist fields.⁴

Archibald Garrod, Consulting Physician to St. Bartholomew's Hospital and a founder of the Association of Physicians, for one, noted the ambivalence of Victorian and Edwardian medical practice to specialization, when he wrote in 1919,

No more beautiful examples of scientific methods and reasoning can be quoted than those employed by the neurologist in localization of lesions of the brain and spinal cord, and in gaining insight into their nature. It is true that his conclusions are based upon anatomical and physiological observation, which enable him to carry in his mind a stereoscopic picture of the brain as transparent as the stereoscopic images of the radiographer, but the men who made those observations were, until recently, engaged in the practice of

of Medicine has risen" Collective Investigation in Britain and America, 1880-1910" *MHist* Vol. 50 (2006), p. 154-156.

³ John Pickstone, *Medicine and industrial society: A history of hospital development in Manchester and its region, 1752-1946* (Manchester University Press, 1985), p. 184.

⁴ For example, Arthur MacNalty, "Some Pioneers of the Past in Neurology" *MHist* Vol. 9 (1964), pp. 249-259.

medicine or surgery, and some of them might even have been classed as “popular physicians”.⁵

For Garrod, clinical neurology’s practice was exemplary of how bedside medicine could be ‘as strictly scientific as the methods of the laboratory’.⁶ Yet, even as he depicted the neurological practice and knowledge of past ‘popular physicians’ as an important sign of the excellence of the British medical tradition, Garrod was simultaneously incorporating medical specialization’s past ambiguities into his broader vision of a new generation of workers who would form a bridge between medicine and science via the laboratory.⁷

Garrod was advocating a transformation already on-going within British medicine, one war-time reality had necessitated.⁸ Following the recommendations of the 1909-13

⁵ Archibald Garrod, “The Laboratory and the Ward” in *Contributions to Medical and Biological Research, Dedicated to Sir William Osler Bart., M.D., F.R.S. In Honour of his Seventieth Birthday, July 12, 1919 By His Pupils and Co-Workers*, Volume 1 of 2 (New York: Paul B Hoeber, 1919), pp. 59-69, 61 (hereafter: *Contributions to Medical and Biological Research*).

⁶ Archibald Garrod, “The Laboratory and the Ward” p. 61.

⁷ Ibid., p. 65; St Bartholomew’s Hospital, where Garrod worked, like many others in 1919, did not have a department of nervous diseases or neurology. “Sir Archibald E. Garrod, K.C.M.G., D.M., F.R.C.P., F.R.S., 1858-1936,” *Saint Bartholomew’s Hospital Reports* Vol. LXIX, (1936), pp. 12-19. See Chapter 2.

⁸ The disinclination of the British government to involve itself in the funding of scientific and medical research before the War is striking. Only the National Physical Laboratory founded in 1902 and the Imperial College of Science and Technology established in 1907 qualified as National investments in science. In 1915, an advisory Council to a Committee of the Privy Council received grants for military scientific research. It is worth noting that from the 1880s on, the British government had been growing substantially in terms of new ministries. The Board of Agriculture established in 1889, the Board of Education in 1899 and in 1911 The National Insurance Act were part of the shift towards larger government. Likewise, post-War Britain saw the Representation of the People Act of 1918, which shifted the country towards a democratic state. Robert Rhodes James, *The British Revolution*, pp. 357, 362, 400; Harrison, “Medicine and the Management of Modern Warfare: an Introduction”, pp. 2-5.

Haldane Commission Report, teaching and general hospitals began forming departments and clinical divisions with various specialties, including neurology.⁹ Soon after, the Medical Research Council (formed in 1920 from its war-time predecessor, the Medical Research Committee) began funding research in various arenas, marking the advent of state-supported medical research programmes.¹⁰

Like many medical specialties and scientific disciplines, neurological practice and research began assuming a more distinct status under these conditions, and one result of neurology's new conformation was that its practitioners began restricting their attention to the organic subset of nervous diseases.¹¹ Neurological research, like medical research more generally, increasingly occurred in the laboratory. In addition, a host of conditions including peripheral nerve injuries, encephalitis lethargica, polio, as well as other diseases, presented neurology and neurophysiology with new research questions and epidemiological challenges.¹² Much of the support for this research came from the

⁹ Francis Fraser, "The Rise of Specialism and the Special Hospitals" p. 181; Charles Newman, "The Rise of Specialism and Postgraduate Education" in *The Evolution of Medical Education in Britain* (London: Pitman Medical Publishing, 1966), pp. 173-176.

¹⁰ Joan Austoker and Linda Bryder eds. *Historical Perspectives on the Role of the MRC* (Oxford, New York, and Tokyo: Oxford University Press, 1989) 23-33; also see: A Landsborough Thomson, *Half a Century of Medical Research* Volumes 1 and 2 (London: Medical Research Council, 1987).

¹¹ William Bynum, "The nervous patient in 18th- and 19th-century Britain: the psychiatric origins of British neurology", p. 125.

¹² For a summary of neurology in this period in: H Campbell Thomson "Review of Recent Work on Nervous Diseases" *The Practitioner* Vol. 103 September 1919 (The Practitioner Limited, 1919): 203-212; Also see, John Russell Silver, *History of the Treatment of Spinal Injuries*, (New York: Kluwer Academic/Plenum Publishers, 2001), pp. 11-99; interestingly these changes were not restricted to Britain only, see Kenton Kroker, "Epidemic Encephalitis and American Neurology, 1919-1940" *Bulletin of the*

Medical Research Council (MRC); hence, in 1921 the MRC provided George Riddoch, at the London Hospital, with funds for research in peripheral nerve injuries, while Charles Sherrington, Edgar Adrian, and Henry Dale received grants for neurophysiological studies between 1921 and 1925, and after.¹³ Interestingly, neurophysiological research routinely succeeded in garnering grants, but many early clinical neurology research proposals simply floundered because of a lack of interest. Lambert Roberts, for instance, a young registrar engaged in neurological research in Cardiff failed to receive even a small allocation for the publication of his MD thesis in 1925.¹⁴ Likewise, though the MRC funded research in certain nervous diseases such as syphilis, polio, and encephalitis lethargica, public health experts supervised the direction and implementation of these research projects, a fact eventually drawing protests in a 1926 editorial in the *Journal of Neurology and Psychopathology*.¹⁵

However, around 1930 neurology's research circumstances began changing, and nowhere was this more evident than at Queen Square, where the hospital had just changed its name to the precise *National Hospital for the Relief and Cure of Diseases of the Nervous*

History of Medicine, Vol. 78 (2004): 108-147. Finally, see the essays in F. Clifford Rose ed. *Twentieth Century Neurology, the British Contribution*.

¹³ National Archives Kew Gardens (Hereafter: NA), FD 1/596, London Hospital Medical Unit; also see, e.g. FD 1/948, Professor A.V. Hill.

¹⁴ NA, FD 1/2343, Research by Mr Lambert Rogers at Cardiff.

¹⁵ Editorial, "The Methods of Neurological Research" *JNP* Vol. VII, No. 26 (1926), p. 143; Experimental work on polio FD 1/2436 NA; for a similar story see, Anne Hardy, "Poliomyelitis and the Neurologists: The View from England, 1896-1966" *BHM* Vol. 71, No. 2, (1997), pp. 249-272. Finally see, *Report of an Enquiry into an Obscure Disease, Encephalitis Lethargica*, No. 121 (London: HMSO, 1918).

System including Paralysis and Epilepsy.¹⁶ There the MRC began actively supporting neurological researchers, and by 1933 had provided substantial grants for a Neurological Research Unit, while philanthropist Bernard Halley Stewart added funds for neurological research fellowships. In 1935, the American Rockefeller Foundation enhanced these gifts still further with an allocation of £120,000 (\$600,000) for capital improvements and research, and made additional small grants to the MRC between 1937 and 1942 for neurological and neuropsychiatric research.¹⁷

In retrospect, the existence of the Research Unit had three significant effects for British neurology. Firstly, it created and supported a small facility for bedside practice and laboratory neurological research to work side-by-side, something that had never existed in an institutionalized way for British neurology before.¹⁸ Secondly, the Unit created a specific location for philanthropic endowment of nervous disease research and even postgraduate research. These measures had also enhanced British neurology's profile internationally, because normally such financial generosity and professional acknowledgement was still not forthcoming in neurological research and institutions elsewhere.¹⁹ Overall, the existence of this Unit represented increased local and national political confidence in neurology at the National Hospital.

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¹⁶ The change of name occurred in 1926. *Report for the Year ending December 31st, 1943*, National Hospital: Queen Square, p. 36.

¹⁷ 401 A National Hospital for Nervous Diseases, 1930-1933, folder 265, box 20, series 401, 1.1.

¹⁸ It could be argue that Frederick Mott's Pathological Laboratory at London County Asylums was an earlier precedent, although the argument I think can only be defended retrospectively.

¹⁹ See Ch. 6.

However, the formation of this Research Unit coincides with another fascinating story revealing the problem of defining ‘best practices’ in neurological research. This concerns a small research project on disseminated sclerosis (now known as multiple sclerosis) supported by the MRC and conducted at the Westminster Hospital between 1927 and 1932.²⁰ The records of this MRC research project from beginning to its conclusion in scandal and recrimination are some of the most extensive on neurology held in the MRC’s archives.

This MRC research project sought to identify a causative agent in multiple sclerosis. When an investigator published results purporting to have identified a pathogenic organism, many physicians and scientists were sceptical. Moreover, another published study reporting successful experimental treatment with vaccines against the alleged organism was troubling, because the author had conducted these trials on his private patients. There was suspicion that he had charged patients for the experimental treatment, as well as concern that ‘hope’ had led to the promising results. Both studies were eventually challenged, initiating a scandal that became a turning point for British neurology, demonstrating to its practitioners the specialty’s institutional inadequacies, and inability to exclude individuals from its community. At the heart of this scandal were three figures: a supposedly ‘naughtily-minded’ woman, Kathleen Chevassut, a young neurologist, Edward Carmichael, and a powerful established Consultant Physician and

²⁰ Aspects of this debate are described without many references by T. Jock Murray, *Multiple Sclerosis: the History of a Disease* (New York: Demos, 2005), pp. 244-248.

neurologist, Sir James Purves Stewart.²¹ In the received and always very brief versions of this account, authors tend to depict Chevassut unfavourably and cast her as an impostor.²² Though it seems true, as they have argued, that the outcome of her research was negligible scientifically, I offer a very different view of this research project's outcomes. In the end this research project collapsed, but in doing so, ironically, it exerted profoundly positive effects for neurology: neurologists found themselves possessing a new Research Unit, had guarantees of postgraduate research fellowships from a local philanthropist, and finally, and perhaps most importantly, they used the scandal as a justification (there were others) for creating a new neurological society, the Association of British Neurologists.²³ The Council of this new society, unlike the Neurological Section of the Royal Society of Medicine, was capable of excluding members from its proceedings – something that had not existed for neurology since the Neurological Society of the United Kingdom disbanded in 1907.

Biographical Contexts of Practice: Youth, Privilege, and the Social Order

A peculiar constellation of traditions, institutions, and individuals frame the origins of the MRC Neurological Research Unit, not the least of which is the difficulty the disorder has always presented in diagnosis. As early as 1881, Jean Martin Charcot had noted that it bore strong similarities with other nervous conditions like locomotor ataxia, symmetrical

²¹ T. R. Elliott to Harvey Cushing, 14 November 1932, The Harvey Williams Cushing Papers in the Yale University Library. Manuscripts and Archives, Yale University Library. Microfilms Series II, Box 25, 469, Microfilm Reel 22.

²² Alastair Compston, "The Story of Multiple Sclerosis", in George Ebers, Hans Lassmann, Ian McDonald, Bryan Mathews, Hartmut Wekerle eds. *McApline's Multiple Sclerosis*, (London, Edinburgh, New York, Philadelphia, Sydney, and Toronto: Churchill-Livingstone, 1998), especially pp. 31, 33, 41.

²³ See Chapters 6 and 7.

sclerosis of the lateral columns, tabes dorsalis, and amyotrophic lateral sclerosis.²⁴ The signs of the condition waxed and waned, causing uncertainty as to whether treatments were effecting cures, alleviating symptoms, or whether the disease was merely running its natural course.²⁵ In many ways, disseminated sclerosis was thus an illness that acutely privileged physicians with expertise in nervous diseases, and this had been the case since Charcot's studies.²⁶ By 1919, however, there was some belief that a micro-organism caused the condition, and physicians mainly working at the National Hospital began using fever therapies to treat it.²⁷ More importantly, their efforts to treat the disease implied the ability to accurately diagnose it.

Among the many physicians interested in treating the disease at The National Hospital in the late-1920s and early-1930s, was a young neurologist and clinical science researcher, Edward Arnold Carmichael (1896-1978). Carmichael, then also working with Francis Fraser (1885-1964), a Professor of Medicine at St Bartholomew's Hospital, had been educated at the Edinburgh Academy, and had received his Bachelor of Medicine and

²⁴ Jean Martin Charcot, *Lectures on the Diseases of the Nervous System*, History of Medicine Series 19 (New York: Hafner Publishing Company, 1962) see, pp. 7, 27, 235, 247.

²⁵ The problem of uncertainty no doubt compounded with concerns about placebo effects. For a general discussion on the placebo see: Harry Collins and Trevor Pinch, *Dr Golem: How to Think About Medicine* (Chicago and London: University of Chicago Press, 2005), pp. 18-34.

²⁶ For an interesting discussion, see Arnold Edwards, *Disseminated Sclerosis* (John Heywood, Deansgate and Ridgefield, Manchester, 1895); he wrote on p. 19, 'In disseminated sclerosis we find a diffused and vague picture, because the disease does not do enough to harm in any one part of the brain or spinal cord to destroy entirely its functions; but it teases and weakens various parts of the central nervous system, so that we have a great number of symptoms mixed up together.'

²⁷ Katrina Gatley, "When Book Medicine Meets Patient", Work-in-Progress Seminar, 17th May 2006, Wellcome Trust Centre for the History of Medicine.

Bachelor of Surgery degrees from Edinburgh University in 1921, where he had received distinctions. Following a House Appointment at the Edinburgh Royal Infirmary under the Moncrieff-Arnott Professor of Medicine, Edwin Bramwell, Carmichael began a nine-month training program in pathological and histological investigations under James Godwin Greenfield (1884-1958) at the National Hospital. Appointed Junior House Physician there in 1923, he quickly rose to Resident Medical Officer by January 1924. In 1925, he returned to Edinburgh as an Assistant to Edwin Bramwell but by 1926, he had departed again for Queen Square, where he took a post as Medical Registrar.²⁸

That Carmichael was a rising star within neurological circles is certain, yet there was much underwriting that advancement. Early on in his career, Carmichael had shown interest in pursuing a strictly-oriented career as a neurological clinical researcher, and being young, highly-trained, and well-regarded, he exemplified the characteristics avidly sought by funding bodies like the Medical Research Council and the Rockefeller Foundation. Moreover, powerful figures within the British medical establishment supported Carmichael's prospects, including Francis Fraser (1885-1964) and Thomas Lewis (1881-1945), with Lewis being an especially important advocate.

Lewis had researched heart conditions during the First World War, and in the interwar period he was an advocate for clinical researchers, and had personally received substantial endowments for cardiology research from the MRC and later the Rockefeller

²⁸ NA, FD 1/2413, Enclosure to Sir Walter Fletcher from Edward Arnold Carmichael, 1932, Development of the Research Unit at Queen Square.

Foundation.²⁹ His campaign, sometimes bombastic, reached a zenith in his 1930 essay, ‘Research in Medicine: Its Positions and Its Need’, where he argued:

[Research] in medicine is most compatible with specialism...It is not possible in research to maintain full familiarity with general medicine, with its ever-changing devices and palliatives, when so much of both time and energy are concerned in studying matters that have no immediate relevancy to practice, and in laboriously and accurately collecting data and critically forming conclusions...Ability to undertake research...is no criterion of practical capacity; and experience in research, especially on the laboratory side, has little or no value in practice; consequently, when preliminary years are spent in large part in this way, they displace years of more valuable practical experience. The proper sequel to such research is not practice but further research – in short, a career largely concerned with investigation.³⁰

He added that ‘young and competent men’, perhaps like Carmichael, could not ‘be expected to hazard the best years of their lives in long and special training without reasonable prospect of corresponding careers before them’.³¹

²⁹ T. R. Elliott to Harvey Cushing, 14 November 1932; Harvey Cushing to T. R. Elliott, 25 November 1932, The Harvey Williams Cushing Papers in the Yale University Library. Manuscripts and Archives, Yale University Library. Microfilms Series II, Box 25, 469, Microfilm Reel 22.

³⁰ Thomas Lewis, “Research in Medicine: Its Position and Its Needs,” *BMJ* (1930), p. 481; also see, “Research Physicians,” *BMJ*, (1930), pp. 503-504; on Lewis see, “Thomas Lewis, KT, CBE, MD Lond., DSc Wales. LL.D, FRCP, FRS” *The Lancet*, 31 March 1945, pp. 419-420.

³¹ *Ibid.*, p. 483.

Lewis's views matched those of his more politically pragmatic friends, such as the richly contradictory Walter Morley Fletcher (1873-1933), Secretary of the Medical Research Council. A scientific idealist but political realist, Fletcher's tenure at the MRC was markedly Mandarin, despite his continual defence of science's autonomy from State control. He had once declared that the progress of scientific knowledge would eventually 'destroy...death' itself.³² Although initially unknown to Fletcher, Carmichael fit perfectly those criteria for MRC support; he was young, qualified in medicine and yet interested in laboratory research. Similarly, in the United States, Lewis and Fraser's friend at the Rockefeller Foundation, Alan Gregg (1880-1957), was tracking the progress of Carmichael's career closely, and in 1932 Gregg would write Daniel O'Brien, the Foundation's European Division Advisor:

It seems to me that investigation on the whole can be better done by full-time men in the medical schools and the real question that I would raise is not so much whether we should help Carmichael or not as whether you are prepared to defend aid both to Carmichael and to Queen's Square or whether one of the alternatives seems to you to be greatly preferable to the other, and why.³³

The point here is that much was riding on Carmichael's career, though it is doubtful that he was aware of just how much. For figures like Francis Fraser and Thomas Lewis, Carmichael epitomised the young academic clinical researcher they desired to see

³² Walter Fletcher, "The National Organization of Medical Research in Peace After War" in *Contributions to Medical and Biological Research*, p. 469.

³³ Alan Gregg to Daniel O'Brien, April 29, 1932, A National Hospital for Nervous Diseases, 1930-1933, folder 265, box 20, series 401, 1.1, RAC.

established in Universities and Hospitals throughout Britain. In the same way, Fletcher regarded Carmichael as archetypical of the talent he wished the MRC to be seen recruiting, and yet, there were still further reasons for Carmichael's importance. By 1932, Francis Fraser, in contact with the Rockefeller Foundation, was likely aware of Alan Gregg's more general query about the prospects of funding neurological research at the National Hospital.³⁴ If so, then it seems reasonable to speculate that figures at the National Hospital and at the MRC were aware that Carmichael represented more than simply a young researcher with great expectations – he was instrumental in a delicate equation constructing an image of the type of clinical neurological research the Foundation desired to support abroad. However, all of these points are only easy to see in retrospect, but in 1927, much of this was still not apparent.

What was perceptible then were the many limitations of the National Hospital. With only 150 beds, twelve physicians, and an overwhelming number of patients with various nervous conditions, there was little likelihood that most patients would receive comprehensive care there.³⁵ Among many of the other available options was the Westminster Hospital, one of oldest voluntary teaching hospitals in London. Indeed, by 1926 the Westminster had begun supporting research into the condition, and several individuals were involved in this including – Kathleen Chevassut (1897-1985), a young researcher looking for the causative agent of the disease, Sir James Purves Stewart (1869-

³⁴ See, for instance, Francis Fraser to Alan Gregg, 6 June 1932, and Alan Gregg to Daniel O'Brien, April 29, 1932, A National Hospital for Nervous Diseases, 1930-1933, folder 265, box 20, series 401, 1.1, RAC.

³⁵ ARCP, Russell Brain Papers Collection, MS 3226/99, W. Russell Brain, "The Organisation of Neurology in London After the War", [undated – c1945-1952].

1949), a Consultant Physician at the Hospital, and J A Braxton Hicks, the Director of the Westminster's John Burford Carlill Pathological Laboratories.³⁶

Kathleen Chevassut was the daughter of Frederick Chevassut, a Clerk in the Anglican Church and a Vicar in Blackburn, where Kathleen was born in 1897.³⁷ Her early school records suggest that her parents urged her from early age to achieve academically, leading one of her school teachers to remark unkindly in a letter of recommendation for her, that Chevassut's mother was too inclined to 'think her [daughter] clever'.³⁸ Around 1916, Frederick was preparing to enrol Kathleen at Bedford College, and he was concerned that his daughter's education be practical and that she be able to 'earn a living' from it.³⁹ He consequently urged the Principal of Bedford College to steer Kathleen away from her interest in mathematics, because 'unless a person is a genius' he deemed it a

³⁶ J G Humble and Peter Hansell, *Westminster Hospital, 1716-1966* (London: Pitman Medical Publishing, 1966), p. 98.

³⁷ Relatively little information about Kathleen Chevassut's early life is available, while I found no information about her later life. I did succeed in having a phone conversation with one of her nephews. At the time when I wrote this dissertation, he was in his seventies. Sadly, he knew almost nothing about her. He could only tell me that he felt certain she had never married or had children. Royal Holloway, University of London (hereafter Kathleen Chevassut RHUL), BC AR200/1 1985 Kathleen Chevassut Archives, Form of Entrance (Bedford College for Women).

³⁸ RHUL, BC AR200/1 1985 Kathleen Chevassut, [Forenames Unknown] Gardner to Tuke, 21 April 1916,.

³⁹ I think Frederick's involvement in Kathleen's education was quite typical; the age of majority then was 21, and so I think it wrong to read this as parental interference. What is more interesting is that Frederick wanted her to be able to earn a living, which I take as a sign of how much the War in Europe was changing circumstances for women in British society. On this point see: Lesley A. Hall, "'Not a domestic utensil but a woman and a citizen': Stella Browne on Women, Health, and Society" in Christopher Lawrence and Anna-K. Mayer, *Regenerating England: Science, Medicine, and Culture in Interwar Britain*, pp. 276-277; Arthur Marwick, *A History of the Modern British Isles, 1914-1999*, p. 24.

difficult career, adding ‘I do not think Kathleen could stand the grind’.⁴⁰ Thus, when she entered Bedford College in October 1916, Chevassut began studying science and medicine, one of only three women in that course at the time.⁴¹

At Bedford, Chevassut studied ‘Intermediate Science’, failing her exams in 1917 but passing them in 1918. She began her medical bachelor’s degree (MB) that year, graduating ‘second class’ in 1922.⁴² That same year she also completed a University of London course in Honours physiology with an emphasis on human anatomy and morphology, receiving a BSc with distinctions.⁴³ Subsequently she applied to Westminster Medical School, where she entered in autumn 1922.⁴⁴

Thereafter Chevassut’s career as a medical student becomes less clear. Later letters between her and Walter Fletcher reveal that she never qualified in medicine, though she appears to have continued training there until 1925, and she received her MSc Degree with Honours in Physiology in 1926.⁴⁵ J A Braxton Hicks and James Purves Stewart

⁴⁰ RHUL, BC AR200/1 1985 Kathleen Chevassut, F. Chevassut to Tuke, 1 October 1916..

⁴¹ RHUL, BC AR200/1 1985 Kathleen Chevassut, Index Card in File (last updated 1983); also see the later comments made by RHUL, BC AR200/1 1985 Kathleen Chevassut, Grafton Elliot Smith to Tuke, 5 December 1929; for the context of women in medicine see Mary Ann Elston, “‘Run by Women, (mainly) for Women’: Medical Women’s Hospitals in Britain, 1866-1948” in ed. Anne Hardy and Lawrence Conrad, *Women in Modern Medicine* (Amsterdam: Rodopi, 2001), 73-107.

⁴² RHUL, BC AR200/1 1985 Kathleen Chevassut, Index Card in File (last updated 1983).

⁴³ RHUL, BC AR200/1 1985 Kathleen Chevassut, [Forenames unknown] Read to Tuke, 23 March 1922; Watson to Tuke, 16 May 1922; Tuke to Watson, 25 May 1922.

⁴⁴ RHUL, BC AR200/1 1985 Kathleen Chevassut, Kathleen Chevassut to Tuke, 23 November 1922.

⁴⁵ NA, FD 1/2746, Fletcher to Chevassut, 11 August 1928.

supervised the degree.⁴⁶ Parts of her MSc thesis, completed in 1926, were published in 1927 in *The Quarterly Journal of Medicine*, the publication associated with the Association of Physicians of Great Britain and Ireland, and then edited by prominent figures like Gordon Holmes, T R Elliot, William Hale-White, David Drummond, and Arthur Hurst, most of whom were members of the Neurological Section of the Royal Society of Medicine.⁴⁷

Chevassut's thesis involved markedly sophisticated biochemistry; moreover, it was a contribution of great practicality to clinical medicine. The Wasserman test for syphilis (introduced in Britain around 1907) made diagnosis of the condition easier. Because diagnosis of syphilis could be embarrassing, the results of the Wasserman test offered considerable advantages to physicians for several reasons.⁴⁸ Chief among these was that laboratory results were more difficult to contest than clinical examinations. The high concentration of protein in serum correlating with the disease offered a rational shield to physicians whose diagnosis might question the moral character of their clients.⁴⁹ Yet, the Wasserman's diagnostic value had some disadvantages for physicians as well.

⁴⁶ Kathleen Chevassut, "Glycolysis in Cerebro-spinal Fluid and its Clinical Significance" *Quarterly Journal of Medicine* Vol. XXI (1927-28), p. 105.

⁴⁷ Ibid.

⁴⁸ See: John Marchildon, *The Wasserman Reaction: Its Technic and Practical Application in the Diagnosis of Syphilis* (London: Henry Kimpton, 1912).

⁴⁹ Stanley Cobb, "One Hundred Years of Progress in Neurology, Psychiatry and Neurosurgery" *Archives of Neurology and Psychiatry*, Vol. 59 (1948): 63-98; A Discussion of the Argyll-Robertson Pupil is in: Macdonald Critchley, "1886-1935 William J. Adie" in *The Ventricle of Memory: Personal Recollections of Some Neurologists*, pp. 3-10; J Egerton Caughey, "William John Adie" in ed. Webb Haymaker *The Founders of Neurology* (Springfield: Charles C. Thomas, 1953), 231-233; Oppenheim, *Shattered Nerves*, p. 69.

Researchers were exploring whether similar laboratory tests of the cerebrospinal fluid or blood might reveal correlations with other conditions, and this seemed an implicit threat to the foundations of diagnostic medical practice.⁵⁰ If disease was demonstrable through laboratory diagnosis, of what importance were the diagnostic skills of physicians? This laboratory beast required taming, and many physicians averred that the technocratic approach to medicine should aid diagnosis. Laboratory results meant nothing without the practical knowledge of disease instilled through years of professional experience and training. As late as 1945, Edwin Bramwell could delineate two ‘unfortunate types of consultant’. There was the:

scientist or ultra-scientist who over-emphasises laboratory and instrumental aids and fails to grasp or understand the patient’s outlook or to adjudicate the facts in their true proportion; and the exponent of what may be termed the art of medicine who although he may be a first class clinician does not make full use of the extraneous aids.⁵¹

Thus, for Bramwell, the extraneous aids of the laboratory were there to confirm what the physician already knew or suspected to be true. Results from the laboratory could not create diagnoses, but rather only affirm the quality of the artisan’s hand.⁵² It was against

⁵⁰ Kathleen Chevassut, “Glycolysis in Cerebro-spinal Fluid and its Clinical Significance” *Quarterly Journal of Medicine* Vol. XXI (1927-28), pp. 91-95.

⁵¹ [Private Collection], Edwin Bramwell, Folder: Odd Notes; Observations & Suggestions. c. 1945.

⁵² Historians have described broader elements of the role of the entrance of laboratory science into medical practice than this discussion alludes. See, for example, Christopher Lawrence, *Rockefeller Money, The Laboratory and Medicine in Edinburgh, 1919-1930: New Science in an Old Country*, (University of Rochester Press, 2005), especially pp. 11-24; idem “Incommunicable knowledge: science, technology, and the clinical art in Britain, 1850-1914”; Harry Marks, *The Progress of Experiment: Science and Therapeutic*

this background that Chevassut's early research appeared, and therefore importantly, was in a context markedly in contrast with those who had interests in promoting clinical researchers such as her peer, Edward Carmichael.

In any case, Chevassut's article defended medical acumen over laboratory diagnosis. Noting that recent clinical researchers had suggested increases of sugar in the cerebrospinal fluid (CSF) were a sign of encephalitis lethargica, Chevassut revealed that under normal circumstances the level of sugar in extracted cerebrospinal fluid decreased after consumption, and she claimed that under normal conditions the concentration of sugar in the blood was in a set proportion to that in spinal fluid. The implications were two-fold: firstly, tests of cerebrospinal fluid needed to be conducted immediately after extraction.⁵³ Secondly, changes in blood sugar levels might correlate with changes of sugar levels in CSF. Testing the second point further, Chevassut, with Purves Stewart's assistance, injected sugar into the bloodstream of patients, and found that such injections changed the concentration of sugar in spinal fluid proportionally. She concluded, 'The apparent increase in the sugar content of the cerebro-spinal fluid in encephalitis lethargica

Reform in the United States, 1900-1990 (Cambridge: Cambridge University Press, 1997); John Harley Warner, "Ideals of science and their discontents in late nineteenth-century American medicine", *Isis* Vol. 82 (1991), pp. 454-478; Steve Sturdy, "The Political Economy of Scientific Medicine: Science, Education, and the Transformation of Medical Practice in Sheffield, 1890-1922" *Mhist* Vol. 36 (1992), pp. 125-159; Steve Sturdy and Roger Cooter, "Science, Scientific Management, and the Transformation of Medicine in Britain, c.1870-1950" *History of Science*, Vol. 36 (1998), pp. 421-466; Gerald Geison, "Divided We Stand: Physiologists and Clinicians in the American Context" in Morris Vogel and Charles Rosenberg ed. *The Therapeutic Revolution: Essays in the Social History of Medicine* (University of Pennsylvania Press, 1979), pp. 115-129.

⁵³ Kathleen Chevassut, "Glycolysis in Cerebro-spinal Fluid and its Clinical Significance" *Quarterly Journal of Medicine* Vol. XXI (1927-28), pp. 95-96.

is merely a reflection of, and dependent upon, the hyperglycaemia usually present in this condition.’⁵⁴ At best, the spinal tap demonstrated facts that a routine blood test could prove just as easily. At worst, hyperglycaemia was a consequence of sugar intake before the physical exam, and therefore a false laboratory sign. In either case, spinal taps for sugar estimations seemed pointless; the diagnosis of encephalitis lethargica simply required clinical acumen. For this research, Westminster Hospital awarded Chevassut the Thomas Smyth Hughes Medical Research Prize in 1927, and she received brief mention in the *London Times*.⁵⁵

That so highly a decorated student should have remained medically unqualified is curious. Grafton Elliot Smith (1871-1937), the Professor of Anatomy at University College London, for one, thought very highly of her, and in 1929 wrote to her former Principal at Bedford College that it was ‘a matter of great satisfaction...to have had something to do with the training of Kathleen Chevassut, whose brilliant work promises to provide one of the most amazing achievements in medical progress.’⁵⁶ With such testimonies on her behalf, the absence of medical qualification would be mysterious, save for a long, defensive undated letter written by her brother Frederick sometime in late 1930 or early 1931 to Walter Fletcher at the MRC. Frederick felt that one of her advisors, James Purves Stewart, had told her to give up pursuing medicine ‘because she would find no money there’ and continue in research, a career better suited to her talents.⁵⁷ It is

⁵⁴ Ibid., p. 105.

⁵⁵“Medical Training, The Place of Science”, *Times* (London) 4 October 1927, p. 11.

⁵⁶ RHUL, BC AR200/1 1985 Kathleen Chevassut, Grafton Elliot Smith to Tuke, 5 December 1929.

⁵⁷ NA, FD 1/2748 Chevassut III, F. G. Chevassut to Fletcher, c. Dec. 1930 or Jan 1931.

difficult to know why or even if Purves Stewart gave this advice, but it is likely, especially given some views of women in medicine he painstakingly recorded in his autobiography, examined shortly.

Sir James Purves Stewart is difficult to write about sympathetically, and much of that difficulty derives from the fact that few had a kind word for him retrospectively. Even his obituaries harbour unkindness; one author of his *Lancet* obituary wrote, for example, that ‘his virtues had their defects: his manifestations of vitality could sometimes be interpreted as self-advertisement, and his almost exaggerated patriotism exposed him to charge of vanity.’⁵⁸ Likewise, Macdonald Critchley (1900-1997) stooped to recall the almost certainly apocryphal anecdote, that when Purves Stewart was a student, his teacher William Gowers (1845-1915) had told him, ‘to take up skins’, an idiom implying that Purves Stewart was a mere specialist wrapped in physician’s clothing.⁵⁹ His *Lancet* obituary repeated the allegation, ‘His early training and all-round ability suited him for the role of general physician, and indeed he was at some pains to assert that as senior physician to a teaching hospital he should be so regarded; but he had little interest outside neurology....’⁶⁰ As Critchley recalled in his address to the Association of British Neurologists celebrating the society’s fiftieth year, Purves Stewart was ‘persona non

⁵⁸ “James Purves Morrison Purves-Stewart, K.C.M.G., C.B., M.A., M.D., Edin., F.R.C.P.” *The Lancet* (1949), p. 1122.

⁵⁹ Macdonald Critchley, “Gordon Holmes: The Man and the Neurologist” in *The Divine Banquet of the Brain and other Essays*, p. 232.

⁶⁰ “James Purves Morison Purves-Stewart, K.C.M.G., C.B., M.A., M.D., Edin., F.R.C.P.” *The Lancet* (1949), p. 1122.

grata' in neurology.⁶¹ (The Association never admitted him into their membership.)

Edwin Bramwell, who regarded Purves Stewart as a friend to be held at a distance, recalled how much he antagonized his peers:

He was never popular with his colleagues and the reason was, I think, well expressed by Sir Thomas Walker...[who]...remarked that he and Purves Stewart had graduated at Edinburgh in the same year, that even in his student days 'Purves Stewart was a marked man and that if he had taken up surgery he would have been Purves Stewart, KCMG, CB, FRCS. But, he said, Purves Stewart has missed his vocation for he should have been head of a great business concern'...Purves Stewart had to advertise, it was, I think, part of his upbringing.⁶²

On another occasion, Bramwell recalled how Purves Stewart had proposed that he might leave part of his estate to Edinburgh University for research scholarships and fellowships in neurology. Bramwell, a notably kind individual, wrote in his diary, 'when one is dealing with a man of Purves Stewart's make-up, one cannot help thinking of motives.'⁶³

Despite this rather unflattering image, Purves Stewart was admired in other respects. On more than one occasion, Edwin Bramwell defended him to other neurologists, and noted his remarkable endurance, 'untiring brain' and retention of minute neurological details.⁶⁴

⁶¹ AABN, Macdonald Critchley, "50th Anniversary Dinner Party of the Association of British Neurologists," folder "Origins." (c.1983), p. 5.

⁶² [Private Collection], Edwin Bramwell, unpublished manuscript, *Rough Notes and Recollections 1945: Sir James Purves Stewart KCMG CB MD FRCP*, pp. 54-55.

⁶³ [Private Collection], Edwin Bramwell, Diary Entry, 13 Oct. 1934, pp. 40-41, Volume 1.

⁶⁴ [Private Collection], Edwin Bramwell, Diary Entry, 161, Volume 2.

In Edinburgh, Purves Stewart's successes as a student led to medals in chemistry, pathology, anatomy, medicine, and surgery. He was the Vans Dunlop Scholar, and won the Ettles Scholarship as the most distinguished Edinburgh graduate of 1894.⁶⁵ Following a House Appointment at Edinburgh Royal Infirmary under Thomas Grainger Stewart (1837-1900), he studied at the University of Jena and then proceeded to a residency at the National Hospital, Queen Square.⁶⁶ Subsequently, he was appointed to the Westminster Hospital at the young age of 29, and shortly thereafter to the staffs of the West End Hospital for Nervous Diseases and the Royal National Orthopaedic Hospital. He became FRCP in 1906.⁶⁷ Of his hospital practice, one author later recorded:

He possessed that curious trick, almost showmanship, found in many great teachers, which employs a slight exaggeration of a normal gesture to ram home a point. To see him take the patient's pulse or elucidate the Babinski reflexes left no doubt in the audience's mind of the essential importance of these fundamental acts. His retinue, too, was impressive: the House Physician carried his gold patella hammer; his secretary attended to take notes and his chauffeur carried a bag containing other instruments. When he entered a ward followed by these functionaries, the Sister and her nurses and the students and visitors, the patients could not fail to be impressed.⁶⁸

⁶⁵ "James Purves Morison Purves-Stewart, K.C.M.G., C.B., M.A., M.D., Edin., F.R.C.P." *The Lancet* (1949), p. 1122.

⁶⁶ [Private Collection], Edwin Bramwell, unpublished manuscript, *Rough Notes and Recollections 1945: Sir James Purves Stewart KCMG CB MD FRCP*, pp. 54-55.

⁶⁷ "Sir James Purves Stewart, Authority on Nervous Diseases", *Times* (London), 16 June 1949, p. 7.

⁶⁸ J. G. Humble and Peter Hansell, *Westminster Hospital, 1716-1966* (London: Pitman Medical Publishing, 1966), p. 98.

A military man and an expressive patriot, Purves Stewart had been involved in every war that occurred in his adult life (including at the age of 72, the Second World War). He received many military honours, including Knight Commander of the Victorian Order (KCVO) and an honorary lifelong rank of Colonel. Moreover, Purves Stewart conversed ably in French, German, Italian and Spanish. An incessant traveller, he published a popular book titled *A Physician's Tour in Soviet Russia* (1933). Similar popular works followed, including: with the surgeon Sir Charles Ballance, *Robert Burns – a Medical Aspect* (1935), his autobiography, *Sands of Time* (1939); and the patriotic volume *Over Military Age* (1942). His professional books included with Arthur Evans, *Nerve Injuries and their Treatment* (1919), and the multi-edition *Diagnosis of Nervous Diseases, Intracranial Tumours* (1927).

Still, few of his colleagues, least of all those competing with him in neurological practice, were much impressed with his literary output. His erudition always appeared exasperatingly megalomaniac and aggrandising in the way it represented his achievements.

Purves Stewart's views of women – which will shortly become important – are difficult to decipher. In his autobiography, only one passage gives much away, and even this hardly qualifies as decisive.⁶⁹ Women, he noted, had been brought into the London Medical Schools during the First World War, mainly because almost all of the able-bodied men were fighting in the trenches, but when the men returned, it quickly became

⁶⁹ James Purves Stewart, *Sands of Time, Recollections of a Physician in Peace and War*, (London: Hutchinson & Co. Ltd, 1939), pp. 240-244.

evident to himself and others that women could not compete with men and were unable to establish themselves in positions commensurate with their abilities in either private practice or public posts. Accordingly they were not encouraged to come to medical school, and in fact many of the London Medical Schools closed their doors to them:

This was not due to any academic educational deficiency, for, in fact, women students gained a large proportion of the competitive prizes. As a matter of experience...we teachers observed that, whereas 100 percent of the men students who succeed in qualifying remain for life in the medical profession, some 50 percent of the women leave the profession of medicine within a few years after graduation, to take up the superior calling of matrimony, usually a whole time job. Moreover...it is usually the ablest and best-qualified women (likewise the most attractive) who secure husbands, leaving the residue to compete as best they can with the 100 percent of men who stick to their profession for life. It is therefore uneconomic for medical teachers to train a mixed class to a high pitch of efficiency knowing that many of the women students, often the most brilliant, are unlikely to persevere with their medical career. There are other drawbacks, such as the athletic hospital activities, unsuitable for women, also the distractions of continuous association during working hours of attractive young men with attractive young women in classrooms, laboratories, and wards.⁷⁰

Obviously, to Purves Stewart, competence and attractiveness went hand-in-hand. The 'residue', by which he had apparently meant neither competent nor pretty, would not be able to compete against their male colleagues. Underwriting his position was an

⁷⁰ Ibid., pp. 241-242.

orthodoxy, which Purves Stewart felt comfortable ignoring because he had campaigned for new facilities for women called to medicine. Yet, there was a Chestertonian edge to his critique and advocacy of women physicians. Having described matrimony as woman's superior calling, he was making the *de facto* argument that women rejecting matrimony for medicine were not superior at all.

Although Purves Stewart's views of women are troubling to us now, it seems appropriate to not accept as self-evident the general disregard in which other physicians held him. In other words, I think it better to reserve judgment on Purves Stewart. The contingencies in which he and Chevassut (and their research) were located were many and are difficult to know, and their agency in these matters, like Edward Carmichael's, highly questionable. Many of the obstacles, resentments, and turmoil they all confronted, resulted more from neurology's structural ambiguities, and broader administrative goals for rationalising British medical research and practice, than they all could have possibly realised.

Medical Practice and Scientific Discovery: the Social Relations of Research

Kathleen Chevassut first came to the attention of the MRC, as the result of a letter from her former Anatomy Professor, Grafton Elliot Smith to Walter Fletcher. In October 1927, Smith wrote to Fletcher, outlining succinctly her talent for medical research.⁷¹ Noting that she was unaware that he was writing on her behalf, he attached an outline Chevassut had

⁷¹ NA, FD 1/2746 Chevassut I, Elliot Smith to Fletcher, 7 Oct. 1927.

sent him regarding her next research project, which Purves Stewart had instigated.⁷²

Chevassut wrote in her proposal:

I considered it useless to employ ordinary bacteriological methods in my attempt to throw light on the aetiology of [disseminated sclerosis]. I therefore attacked the problem from an entirely new point of view and employed methods and technique, which up to the present time have not been used in work on Disseminated Sclerosis. The results have been most encouraging, but there is an immense amount of work to be done before one can speak with certainty on the subject. The aim of my present research is, of course, to identify with certainty the causative organism and ultimately if possible, produce an anti-serum.⁷³

Chevassut's proposal must have intrigued Fletcher. Using a protocol first pioneered by Joseph Edwin Barnard (1870-1949) in a 1925 study of filterable viruses associated with malignant growth, Chevassut suggested using an ultra-fine filtration assay to examine the cerebrospinal fluid of patients with disseminated sclerosis.⁷⁴ Her hypothesis was that the filtration system would remove proteins and other contaminants she supposed detrimental to the growth of a residual organism. Once contaminants were removed, the organism

⁷² "A request from Sir James Purves Stewart that I should investigate the problem of the causation of disseminated sclerosis was responsible for the initiation of this research." Kathleen Chevassut, "The aetiology of disseminated sclerosis," *The Lancet* (1930), p. 560.

⁷³ NA, FD 1/2746 Chevassut I, Chevassut to Elliot Smith, 5 Oct. 1927.

⁷⁴ For the technique, see Joseph Barnard, "The microscopical examination of filterable viruses associated with malignant growths", *The Lancet* (1925), pp. 117-123; on Barnard, see "Obituary Mr J E Barnard," *Times* (London), 26 Oct. 1949, p. 7; on Barnard's work for the MRC see: A. Landsborough Thomson, *Half a Century of Medical Research* vol. 2 *The Programme of the Medical Research Council (UK)* (London: Medical Research Council, 1987), p. 115.

could be cultured in a nutritious medium. Moreover, Chevassut believed she had seen in preliminary tests ‘spherules’ that changed shape, and therefore possibly indicating an organism with a life cycle. Joseph Barnard, she noted, had confirmed her observations.⁷⁵

Chevassut’s research built upon her existing knowledge of cerebrospinal fluid chemistry and pathology, and her proposal was well within range of her expertise. Moreover, her hypothesis and strategy were sensible in light of recent advances on disease. In his 1955 textbook on disseminated sclerosis, Douglas McAlpine noted, for example, that between 1910 and 1939 there were approximately fifty similar studies in Britain, France, Germany, and the United States.⁷⁶ In addition, Chevassut’s approach was similar to methods bacteriologists were pioneering for other conditions in the MRC’s National Institute for Medical Research.⁷⁷ Yet, disseminated sclerosis was notoriously challenging to diagnose, and Chevassut required the assistance of a physician capable of making differential diagnoses. In short, Chevassut’s work presented particular challenges and uncertainties; more positively, it held out hope for a vaccination for the dreaded disease.

After receiving Elliot Smith’s letter, Fletcher consulted Joseph Barnard. Admitting that he had advised Chevassut, Barnard recommended that Fletcher wait until ‘her work...is proceeding on sound lines.’⁷⁸ However, by June of 1928 Barnard could confidently recommend support. Fletcher asked him then specifically about her microscopic work, ‘it

⁷⁵ See both: NA, FD 1/2746 Chevassut I, Chevassut to Smith, 5 Oct. 1927; Smith to Fletcher, 7 Oct. 1927.

⁷⁶ Douglas McAlpine, Nigel Compston, and Charles E. Lumsden, *Multiple Sclerosis* (E. & S. Livingston Ltd., 1955), 257-258; also see, “Neurological Therapeutics” *JNP*, Vol. 14, No. 64 (1934), pp. 369-373.

⁷⁷ A. Landsborough Thomson, *Half a Century of Medical Research*, pp. 114-117.

⁷⁸ NA, FD 1/2746 Chevassut I, Joseph Barnard to Fletcher, 13 October 1927.

would greatly assist me to know what importance you attach to Miss Chevassut's observations with the ultra-microscope.'⁷⁹ Barnard replied, 'so far as her microscope work is concerned, I have not seen a great deal of it but what I have seen has appeared to me to be carefully done.'⁸⁰

Barnard's equivocal comment is important to note: he had answered Fletcher's question vaguely, and yet, at the same time, Chevassut was citing him as a witness to her observations.⁸¹ For instance, she reported in July 1928, 'the whole research would have been non-existent but for all [Barnard's] instructions and assistance. It is because I have had all this invaluable aid from him and that advantage of his expert knowledge in this field of research that it has been possible to carry out the research.'⁸² Barnard's reply to Fletcher, by contrast, suggested a lack of interest, an intriguing divergence from Chevassut's convictions. At the very least, he seems to have been keeping his distance.

Larger problems were also in evidence, making Chevassut's position seem professionally vulnerable. An earlier letter from Barnard hinted darkly of looming 'administrative' problems at the Westminster Hospital.

The main difficulty I see in this matter is that Sir James Purves Stewart has been supplying her with a good deal of the apparatus she needs, and I think there is no doubt

⁷⁹ NA, FD 1/2746 Chevassut I, Fletcher to Barnard, 25 June 1928.

⁸⁰ NA, FD 1/2746 Chevassut I, Barnard to Fletcher, 28 June 1928.

⁸¹ See her earlier letter to Grafton Elliot Smith; NA, FD 1/2746 Chevassut I, Chevassut to Elliot Smith, 5 October 1927.

⁸² NA, FD 1/2747 Chevassut II, A Chevassut to Fletcher, 19 July 1928.

that he has very liberally supported her in this particular work on Disseminated Sclerosis. He appears, however, to regard this as a sufficient reason for appropriating the results of the work and, if I am rightly informed, is already making some use of them in his practice.⁸³

Another equally bleak letter from Elliot Smith followed soon after, 'the difficulty at the present moment is that she has neither the financial resources nor the scientific standing to be independent of others.' Highlighting the professional security MRC support might provide Chevassut by granting external financial support, he added, 'it is important that she be extricated from the vicious circle which prevents her from carrying on the strictly scientific investigation...'⁸⁴

Thus, Fletcher must have viewed the project with reservations, but with James Purves Stewart now, apparently, making use of her research in his private practice, the uncertainty of Chevassut's professional circumstances, and Barnard's recommendation that she be supported, it was becoming clear to Fletcher that some outside arbitrator was required. Consequently, in August 1928, the MRC provided Chevassut with a small grant for research and salary, though they stipulated that she take the medical qualifying exam before the year ended.⁸⁵ This she attempted but eventually wrote to Fletcher, 'I have withdrawn my name from the M.B. exam at present being held. I am so sorry but I felt it was quite hopeless and now I have the very unpleasant and depressing feeling that I have

⁸³ NA, FD 1/2747 Chevassut II, Barnard to Thomson, 5 May 1928.

⁸⁴ NA, FD 1/2746 Chevassut I, Smith to Fletcher, 7 June 1928.

⁸⁵ NA, FD 1/2746 Chevassut I, Thomson to Barnard, 25 April 1928; Barnard to Thomson, 7 May 1928; NA, FD 1/2747 Chevassut II, Fletcher to Chevassut, 11 Aug. 1928.

not fulfilled my part of the conditions.’⁸⁶ Fletcher, increasingly aware of her circumstances at the Westminster, acknowledged later and sympathetically, ‘The council have certainly not disowned you’.⁸⁷

Barnard and Elliot Smith’s apprehensions about the charged atmosphere at the hospital were quickly realised. Hitherto, the difficulties appear to have been between Chevassut and the administrators and physicians working at the hospital, but tensions were also growing between the MRC and the Westminster Hospital authorities.⁸⁸ The Chairman of the Hospital, Kenneth Wolfe Barry (1879-1936) objected pointedly, ‘to Miss Chevassut being called “independent” when she had for years had so much help from the Hospital, direction from Dr [Braxton] Hicks, and [clinical] material from Sir James Purves Stewart.’⁸⁹ Even in late autumn of 1928, Chevassut had detailed the vitriol and vindictiveness of the hospital’s administrators and physicians, and had noted that Purves Stewart had ‘made the surprising suggestion that he should first see any report which I intend to make to [to the MRC]...on the work. I replied that I could not possibly agree to this and point out that any such report would concern the Medical Research Council and myself only. It seemed to me the most absurd suggestion.’⁹⁰

⁸⁶ NA, FD 1/2746, Chevassut I, Chevassut to Fletcher, 30 Nov. 1928.

⁸⁷ NA, FD 1/2746 Chevassut I, Fletcher to Chevassut, 21 Feb. 1929 in response to Chevassut to Fletcher, 19 Feb. 1929.

⁸⁸ I spent several days searching The Westminster Hospital’s Archives in the London Metropolitan Archives and found no evidence pertaining to these administrative problems specifically.

⁸⁹ NA, FD 1/2746 Chevassut I, Personal note from A L Thomson, c. Aug. 1929.

⁹⁰ NA, FD 1/2746 Chevassut I, Chevassut to Fletcher, 30 November 1928.

It is difficult to capture the ambiguities of her position. On one hand, Chevassut felt under enormous pressure to publish and to continue working with the authorities of the hospital and James Purves Stewart. Completely dependent upon Purves Stewart for her cerebrospinal fluid samples, her research was jeopardised by a potential threat of withdrawal of clinical material. On the other hand, the MRC asserted that she should think herself their autonomous agent, and with Fletcher paternalistically reminding her that 'in science there is no priority in ideas but only in the production of scientific evidence,' the pressure was enormous.⁹¹ Her results were unverified and unpublished, a physician was using her research to produce a vaccine to treat desperate patients against an organism not yet proven to exist, and her MRC salary was conditional upon results she was not certain she could even produce. Continual 'failures' were all she could report to the MRC, though despite this fact, they renewed her grant in the spring 1929.⁹²

The true extent of Purves Stewart's involvement finally became clear in the summer of 1929, when Fletcher observed in a personal note, '[Chevassut] has been supplying vaccines for those on the staff [Purves Stewart] at Westminster and thinks this monopoly ...most undesirable. She would like to widen the field of inquiry by getting in touch with men at Queen Square and elsewhere. She would welcome a properly organised inquiry, if feasible, into the value of this vaccine, conducted by suitably chosen clinicians at more than one centre.' He also noted, the 'Westminster people were pressing her to publish and

⁹¹ NA, FD 1/2746 Chevassut I, Fletcher to Chevassut, 1 January 1929.

⁹² NA, FD 1/2746 Chevassut I, Report on Research on the Etiology of Disseminated Sclerosis; Thompson to Chevassut, 27 March 1929.

were making publication a condition of renewing her research studentship.⁹³ Shortly later, Chevassut outlined her reluctance to publish:

I saw Mr Wolfe-Barry, the chairman of the hospital today.... He asked me, could it be true that I had refused to have any association with Sir James Purves Stewart as regards the publication of the work. I said that the question had not yet actually arisen, but I understood that Dr Hicks had had a letter from Sir James asking him to collect the laboratory material together so that it could be published as a joint publication.... I said that I had not been directly spoken to on the subject at all but that certainly a joint-publication was out of the question so far as I was concerned. I pointed out that in the first place I do not consider that the clinical side should be published at all and secondarily nothing would induce me to have my name associated with [Purves Stewart's].⁹⁴

Though she was dependent on Purves Stewart for cerebrospinal fluid, Chevassut thought his research – in turn dependent upon her ability to produce vaccines – premature, misguided, and unethical. Yet, Chevassut's reluctance was worrying to others. Though there were obvious problems between her and Purves Stewart, there was also too much uncertainty surrounding her work. She, for example, had continued denying that the existence of a micro-organism had been demonstrated, noting in one report sent to Fletcher, 'research is being carried out on the aetiology of Disseminated Sclerosis with

⁹³ NA, FD 1/2746 Chevassut I, Barnard to Thomson, 5 May 1928. The record from Barnard's letter on, reveals on-going difficulties of her position. See, for example, Personal note in same file from Fletcher, 11 July 1929, although note that numerous letters appear in between these dates (and also afterwards) explaining more fully the circumstances.

⁹⁴ NA, FD 1/2746 Chevassut I, Chevassut to Fletcher, 24 July 1929.

special reference to the possibility of the causative agent being a filterable virus.' She added, however, 'this apparent virus, which can be cultured from the cerebrospinal fluid from cases of disseminated sclerosis, is specific in that it is practically invariably present in such cultures and has never been demonstrated in controls.'⁹⁵ Such a preliminary result was publishable, and accordingly, when the MRC renewed her grant, they insisted as well that she produce a preliminary notice immediately. In his letter informing her of this, an aggravated Fletcher wrote, 'the Council have now been able to consider the question of your research grant in all the quite exceptional and somewhat embarrassing circumstances that surround it':

When...publication is made, the Council will be free to consider what further support, if any, they should give to you in this inquiry. If they can be satisfied that the facts so far reported have real significance and promise, and if they can be satisfied that you are personally competent to conduct it further, they will be prepared, of course, to give you generous financial aid...the Council do not feel free to secure this now until causes of possible embarrassment and misunderstanding are removed by your making preliminary publication.⁹⁶

Though at odds with this decision, Chevassut agreed, and her paper, 'The Aetiology of Disseminated Sclerosis' finally appeared in *The Lancet* in March 1930.⁹⁷ Joseph Barnard

⁹⁵ NA, FD 1/2746 Chevassut I, Report on Research on the Etiology of Disseminated Sclerosis, 28 September 1928.

⁹⁶ NA, FD1/2746 Chevassut I, Fletcher to Chevassut, 6 December 1929.

⁹⁷ NA, FD1/2746 Chevassut I, Fletcher to Chevassut, 10 December 1929; Chevassut to Fletcher, 18 December 1929; Chevassut to Fletcher, 13 January 1930; Chevassut to Fletcher, 3 March 1930.

edited the final draft.⁹⁸ She reported the appearance of ‘spherules’ in cell-cultures taken from the cerebrospinal fluid of patients with the disease and suggested that they were unique to cases of disseminated sclerosis.⁹⁹ Others, she stated, could testify to these observations, including Joseph Barnard. Additionally, Chevassut noted that Lange Tests (an analysis of protein concentrations) of diseased patients cerebrospinal fluid produced unique gold curves relative to controls.¹⁰⁰ These preliminary results held out a hope for a vaccine for the disease, and this hope was realised still further with Purves Stewart’s publication, which appeared in the same issue of *The Lancet*, and indicated successful results from vaccine trials in his patient population.¹⁰¹

A wave of publicity followed the publication of these papers, and overnight both Purves Stewart and Chevassut became celebrities with the lay and medical press.¹⁰² For her part, Chevassut was disdainful of press attention, although she noted that a Trust had indicated interest in the work.

⁹⁸ NA, FD1/2746 Chevassut I, Chevassut to Fletcher, 13 January 1930; James Purves Stewart to Walter Fletcher, 24 January 1930.

⁹⁹ Kathleen Chevassut “The Aetiology of Disseminated Sclerosis.” *The Lancet* (1930), p. 552.

¹⁰⁰ *Ibid.*, pp. 556-557; later it was noted in Douglas McAlpine, Nigel Compston, and Charles E. Lumsden, *Multiple Sclerosis*: ‘It should be emphasized at the outset that in multiple sclerosis the cerebrospinal fluid (C.S.F.) may be normal in all respects. Furthermore, in the fluid there is no characteristic abnormality specific of the disease, although a combination of pleocytosis, an increase of protein, and a positive Lange colloidal gold curve, in conjunction with a negative Wassermann reaction, is highly suggestive.’ p. 123. A gold curve is a now obsolete colorimetric test. Gold solution was added to serial dilutions of spinal fluid. In the presence of altered proteins produced by the syphilis bacillus, the gold causes a precipitation reaction to occur leading to change in the solution’s opacity, creating to a novel reading relative to control samples.

¹⁰¹ James Purves Stewart, “A Specific Vaccine Treatment in Disseminated Sclerosis” *The Lancet* (1930), pp. 560-564.

¹⁰² NA, FD1/2746 Chevassut I, See Press Clipping in File, for example, Anon, *The Star*, 19 Mar 1930; also see, “The Germ of Multiple Sclerosis,” Vol. 72, *Science* (1930), pp. x-xi.

The possibility of it getting into the lay-press never occurred to me. Every time I went in or out of the Hospital there seemed to be a camera on the doorstep. I got quite exasperated at the time; now however I am wondering if some good may not come out of it for the work, because I have had several letters offering to give money to the work. One of these in particular may turn out to be of much importance. *It is in connections with a Trust. As the sum involved annually is £14,000 and the founder of it seems really attracted by the work there are great possibilities in it, if we secure it.*¹⁰³

This Trust was almost certainly the Halley Stewart Trust, the philanthropy that would be eventually supporting research fellowships in neurology at the National Hospital.¹⁰⁴ (By ‘we’, Chevassut was likely referring to herself and the Westminster Hospital.) In any case, the publicity storm did little to improve relations at The Westminster Hospital between the spring of 1930 and late winter, and Chevassut felt control of her project steadily eroding.¹⁰⁵ As she was the only one able to produce the cell-cultures, she spent more and more of her time producing vaccines.¹⁰⁶ Purves Stewart had complained about this earlier, seemingly noting that it was taking her up too much of her time, but perhaps voicing an entirely different concern. He wrote to Fletcher, ‘I wrote to the Chairman

¹⁰³ My emphasis. NA, FD1/2746 Chevassut I, Chevassut to Fletcher, 21 March 1930.

¹⁰⁴ See, comments in: Bernard Halley Stewart, *The Lancet*, 2 April 1932, p. 751.

¹⁰⁵ Ibid; NA, FD1/2747 Chevassut II, Chevassut to Fletcher, 28 March 1930, here she reports that Braxton Hicks had ceased to be her Director; Chevassut to Fletcher, 9 April 1930; Wolfe-Barry to Fletcher, 10 April 1930 Westminster Hospital Proceedings; Chevassut to Fletcher, 11 April 1930, and so on.

¹⁰⁶ See letter between NA, FD1/2747 Chevassut II, Elliot Smith and Fletcher, 2 April 1930; and Fletcher to Elliot Smith, 4 April 1930. Importantly, note that Elliot Smith’s letter suggests, “My reason for writing to you is to ask whether you – in your private capacity – would approve of an appeal to the Rockefeller Foundation for financial assistance to secure her independence.” It may be that Smith advised her to seek funding from the Halley Stewart Trust, an action, as we will see, significantly negative on Chevassut’s career.

stating that unless he withdrew his instructions to the Pathological laboratories to supply upon the prescription of another physician experimental vaccines to patients whom I had not seen or examined, I would resign'.¹⁰⁷ No doubt Purves Stewart's motives were under suspicion, but with the commotion now ensuing at the hospital and in the press, and given the disease's manifestations, it is small wonder that other physicians there were calling upon her to produce vaccines. Fletcher and others must have felt anxious. Chevassut's research had yet to be verified and on Purves Stewart's work Fletcher could muster only the words 'premature' and 'to be deplored in the public interest' because they might give rise to false hope.¹⁰⁸ Chevassut, from the start, had been against the publication of Purves Stewart's results.¹⁰⁹ It was the worst of possible situations, and ominously, a week after Chevassut and Purves Stewart's publications appeared, Fletcher received a letter from Charles Symonds (1890-1979), the Consultant physician for nervous diseases at Guy's Hospital.

¹⁰⁷ NA, FD1/2747 Chevassut II, Purves Stewart to Fletcher, 29 January 1930.

¹⁰⁸ NA, FD1/2747 Chevassut II, Fletcher to Webb, 3 May 1930; In a letter to Chevassut, Fletcher wrote, "The scientific results already publicly reported by Sir James Purves Stewart own their only value to his individual experience, and he would be the first to admit that so far as they go they supply no trustworthy evidence for any curative value in a disease like this, where diagnosis may be doubtful and where no judgement can be fairly formed until the lapse of several years. They regard it as of the utmost importance in the public interest that no false hopes should be raised and if they take any steps now to promote further trials of the vaccines it must be clearly understood that this does not imply any confidence that a useful therapeutic agent has been found." NA, FD1/2747 Chevassut II, Fletcher to Chevassut, 14 April 1930.

¹⁰⁹ NA, FD1/2747 Chevassut II, Private and Confidential For Members of the Medical Research Council Only, 1930. "The results gained experimentally with monkey, and other observations, by Braxton Hicks, Hocking, and Purves-Stewart were published I understand without Miss Chevassut's approval and against her wishes."

In common doubtless with other neurologists, I am receiving, from private patients with disseminated sclerosis, enquiries about the “new cure”; whether I think it is any good (to which I can only answer that I do not know) and how, where, and at what expense it is to be procured. The latter questions I do not quite know how to answer. I understand that the work recently published by Miss Chevassut and Sir James Purves-Stewart has been carried out under the auspices of the Medical Research Council and I write to you for guidance.¹¹⁰

It was now obvious that Chevassut’s results required immediate verification. Needed for this was a credible clinical scientist, and a young neurologist working at St Bartholomew’s Hospital and the National Hospital, Queen Square, appeared an ideal candidate.¹¹¹

Medical Practice and Verification: Through Discipline, Institutions Arise

In a letter marking the beginning of Edward Carmichael’s twenty-nine year relationship with the MRC, Fletcher wrote to Joseph Barnard, ‘I feel pretty sure that you will like him personally’ and added that though Carmichael was not overly qualified for the position he had two attractive qualities. ‘No doubt he has much to learn on the technical laboratory side, though he has already shown competence there. Quite apart from this particular problem...it must, I think, be useful to get an able young man at work in this direction who can *combine* experimental work in the laboratory with skilled clinical work.’¹¹²

¹¹⁰ NA, FD1/2746 Chevassut I, Symonds to Fletcher, 31 March 1930.

¹¹¹ NA, FD1/2746 Chevassut I, Fletcher to Henry Dale, 14 April 1930.

¹¹² NA, FD1/2747 Chevassut II, Fletcher to Barnard, 16 April 1930; also see Private and Confidential For Members of the Medical Research Council Only, 1930.

Barnard offered whatever assistance was needed, 'the help to Miss Chevassut must be of a somewhat detached nature, as it has been already. That to Carmichael can be as inasmuch as he chooses to make it [sic]'.¹¹³

The MRC planned a two-prong approach to Chevassut's research. Carmichael was to replicate her 'bacteriological' research, while limited vaccine-trials conducted by other neurologists would begin with the purpose of confirming Purves Stewart's results, and additionally these neurologists would provide Chevassut with cerebrospinal fluid.¹¹⁴ For himself, Fletcher believed the vaccine-trials premature, yet by conducting the trials the MRC publicly adopted a pragmatic position neither endorsing Purves Stewart's work nor ignoring it.¹¹⁵ His reasons for reserve were all too obvious. As Harry Marks has noted, research practices in Britain and America were changing in this period and the double blind research trial was still not standard.¹¹⁶ However, what was obvious to the MRC was that Chevassut had been relying on Purves Stewart to supply her with cerebrospinal fluid from patients with disseminated sclerosis. This in their view created two problems: Firstly, Purves Stewart's ability to diagnose patients accurately with the condition had to be accepted; indeed, they never questioned explicitly his ability to do so, yet it was understood that his diagnosis was accurate to a degree only. Secondly, because Purves Stewart had been telling Chevassut which samples were positive (from patients with the condition) and which were controls, he created two sources of research bias. Chevassut knew which samples she should expect positive results from, and she was under pressure

¹¹³ NA, FD1/2747 Chevassut II, Barnard to Fletcher, 29 April 1930.

¹¹⁴ NA, FD1/2747 Chevassut II, Private and Confidential, 1930.

¹¹⁵ NA, FD1/2747 Chevassut II, Fletcher to Chevassut, 14 April 1930.

¹¹⁶ Harry M Marks, *The Progress of Experiment*.

to confirm the physician's diagnosis because she had claimed that the Lange Colloidal Curve in such cases was unique.¹¹⁷ By providing Chevassut with blind samples, she would have to demonstrate that the Lange test accurately identified positive cases. Not said here was a concern that Purves Stewart had been overly influencing her experimental results. An early letter from Purves Stewart to Fletcher was not encouraging.

I understood from your telephone message...that certain physicians will be nominated by the Medical Research Council to be associated with me in the clinical part of the research and that their instructions are to confine themselves to hospital patients, whilst I am to be permitted to select suitable private patients. I confess I feel rather uneasy if I am to be the only person to have private cases investigated. Quite half of the patients referred to in my own recent article were private cases. You can readily understand that selected cases of this sort are often the best for purposes of adequate supervision and treatments. I do not wish it to be felt that I am having an unfair advantage over the other physicians, by being allowed to select suitable private cases for experimental treatment.¹¹⁸

From one point of view, Purves Stewart's remarks must have appeared cunningly ingenious. He appeared to be arguing that private patients presented fewer obstacles in treatment and supervision, but was actually implying that diagnosis of hospital patients might be problematic. The MRC and his peers in neurology, however, were of a different opinion:

¹¹⁷ For a discussion on types of research bias, see Harry Collins and Trevor Pinch, *Dr Golem: How to Think About Medicine*, pp. 32-34.

¹¹⁸ NA, FD1/2747 Chevassut II, Purves Stewart to Fletcher, 22 April 1930.

On the clinical side it is the unanimous opinion of other neurologists that Purves Stewart's clinical results so far as they go, allow no conclusions to be drawn. There is probably no disease in which results given of any given therapeutic treatment are so difficult to assess on a sound basis; other disorders, whether post-syphilitic or non-syphilitic may mimic it. No one can doubt Purves Stewart's competence here, and his diagnosis of disseminated sclerosis maybe accepted with a high degree of probability, but, as is well known, in this disease, conditions giving the temporary and even protracted appearance of cure may be caused by treatment of any kind or may occur without any treatment.¹¹⁹

It was for these reasons that Fletcher needed to identify neurologists of sufficient skill and status to provide Chevassut with samples of cerebrospinal fluid. If from these samples, Chevassut could both confirm diagnosis of the disease and grow an organism, then there would be no doubt that this was the making of a great discovery. Only further replication and independent verification of her results would be required, and that was Edward Carmichael's task. Accordingly, Fletcher wrote to four neurologists asking them for assistance: Charles Symonds (1890-1979), Francis Walshe (1885-1973), Eric Blake Pritchard (1889-1962), and George Riddoch (1888-1947).¹²⁰

These neurologists were among the elite of London neurology. Symonds, an Oxford MA and DM, had spent a year at Johns Hopkins Hospital with Adolph Meyer and had returned to appointments at Queen Square and Guy's Hospital. Francis Walshe, educated

¹¹⁹ NA, FD1/2747 Chevassut II, Fletcher to Webb, 3 May 1930.

¹²⁰ NA, FD1/2747 Chevassut II, Fletcher's letters to them, 2 May 1930.

at University College Hospital, had worked with Victor Horsley (1857-1916) in Africa during the War, and following that had been a lecturer at Oxford, where he worked with Charles Sherrington (1856-1952). Walshe, a waspish personality, had been appointed to a newly established Chair in Neurology at UCH in 1920; like Symonds, he was a physician at the National Hospital and had spent time in Baltimore as visiting professor in neurology in 1925. Blake Pritchard, educated at Kings College London and Cambridge, currently held a position at the Maida Vale Hospital for Nervous Diseases. George Riddoch, trained at Aberdeen University, had during the War, collaborated with Henry Head (1861-1940) at the London Hospital, where he eventually became Consultant physician. Riddoch, like Blake Pritchard, held a position at Maida Vale.

These men met with Fletcher at the MRC headquarters in late May 1930. James Purves Stewart and Kathleen Chevassut were notably not present. The minutes of this meeting now seem vague and difficult to understand. Francis Walshe observed acerbically that Chevassut was spending ‘four-fifths of her time’ preparing vaccinations for Purves Stewart. George Riddoch added that the vaccination experiments were still “‘too empirical” in the present uncertain state of knowledge [of] the “virus”’. Symonds ‘thought that therapeutic tests were ethically justified if they could be carried out on a sufficiently large scale to give early indication of the value of the vaccine’ but ‘in view of the fact that at present only Miss Chevassut was capable of making the vaccines, he thought that this was impossible’. At the end of the meeting, they decided to provide

Chevassut with cerebrospinal fluid but were unsure when vaccination trials would begin.¹²¹

The minutes of this meeting are more notable for what they do not say. Since Fletcher had suggested independent vaccination trials, Purves Stewart had seemed too enthusiastic about the participation of his peers. He had endeavoured to meet with the other neurologists in order to ensure that it not be felt he had, “unfair advantage”.¹²² He also started holding dinner parties at his house for the other neurologists, of which, on one occasion, an absent Francis Walshe sarcastically commented to Fletcher, ‘I gather that it was a splendid occasion: a precedent that the “whole time” scientist will hasten to follow when inaugurating a research.’¹²³

A diary entry by Edward Carmichael’s former advisor at Edinburgh, Edwin Bramwell, clarifies this further. All along, ‘Purves Stewart was incurring the rancour of his colleagues for large numbers of cases of disseminated sclerosis were being sent him from, I believe, all over the world, and he must have been making large sums of money for he charged high fees.’¹²⁴ The Bramwell diary, which offers a lengthy discussion of these events, pays little attention to Chevassut at all. Blame entirely fell, at least from

¹²¹ NA, FD1/2747 Chevassut II, Memorandum: *Disseminated Sclerosis*, 5 May 1930; on this point as well, see Fletcher to Symonds, 5 May 1930, Riddoch to Fletcher, 5 May 1930.

¹²² NA, FD1/2747 Chevassut II, Purves Stewart to Fletcher, 22 April 1930.

¹²³ NA, FD1/2747 Chevassut II, Walshe to Fletcher, 17 May 1930.

¹²⁴ [Private Collection], Edwin Bramwell, Diary Entry, 13 Oct. 1934; Volume 1 pp. 33-43, 37

Bramwell's perspective, on Purves Stewart.¹²⁵ Indeed some sense of this was apparent in a letter from Fletcher to him:

The Council have entrusted the [vaccine] trials to men not engaged in competitive private practice, but having fully clinical facilities in their hospitals. In this way the Council have avoided the embarrassment which might come from the invidious task of selecting among rival practitioners those who might well be supposed to gain an immediate professional advantage from early supplies and early experience of some new and important therapeutic substance. The same principle, though perhaps in less degree, is certainly operative in the present instance. Another reason of different kind is that by restricting the field of inquiry to hospital cases, the Council protect the clinicians engaged from the importunities with which they might be pursued by anxious relatives and friends seeking in their desperation any help, however hypothetical, for the sufferers in which they are interested.¹²⁶

In perhaps a sign of their lack of enthusiasm, Symonds, Walshe, Pritchard, and Riddoch provided Chevassut with few samples the rest of the year.¹²⁷ In a phone conversation Chevassut noted some concerns, 'the supply from the 4 clinicians has not been satisfactory so far, and she has not obtained a positive result on those she has received. She suggested tentatively that carriage of the fluids might affect cultures' negatively.¹²⁸ By early December 1930, Chevassut had received only thirty-two samples in total from

¹²⁵ Ibid.

¹²⁶ NA, FD1/2747 Chevassut II, Fletcher to Purves Stewart, 9 May 1930.

¹²⁷ NA, FD1/2747 Chevassut II, See letters from July through November 1930.

¹²⁸ NA, FD1/2747 Chevassut II, Transcript, 10 October 1930.

the neurologists; she had received one-hundred and fifty from Purves Stewart between 1929 and 1930. She did not correctly identify any of the fourteen positive samples, and in one case mistook a case of chorea for the disease.¹²⁹

Carmichael's results were equally negative. A memorandum records a tense evening at the MRC, where Kathleen Chevassut sat with twelve men including, T R Elliot, a Mr. Church, Joseph Barnard, Peter Laidlaw, Mr. Elford, Carmichael, Walshe, Symonds, Riddoch, Purves Stewart, Blake Pritchard, and Fletcher.¹³⁰ Carmichael reported being unable to verify a single aspect of her work. He, along with James Greenfield, had attempted to find a Gold Colloidal Curve similar to the one she had reported, and had not succeeded, but nor had they exactly followed her protocols. The Lange Test, a basic spectroscopic examination, was a technique relying upon changes in light passing through a solution. Changes in light relative to controls suggested a deviation relative to protein concentration, and Chevassut had argued that this deviation was unique for disseminated sclerosis. Importantly, Carmichael controlled his experiments with cerebrospinal fluid from patients with syphilis – note that this was something Chevassut had not done and could not do without the aid of Purves Stewart. The minutes recorded:

Greenfield and Carmichael failed to find a characteristic Lange curve in disseminated sclerosis. They standardised their gold solution by a biological test (i.e. against a standard G.P.I fluid). Miss Chevassut used a different gold solution, standardised by chemical

¹²⁹ NA, FD1/2747 Chevassut II, 1573 Transcript, 10 Oct. 1930.

¹³⁰ NA, FD1/2747 Chevassut II, Memorandum: *Disseminated Sclerosis*, 5 May 1930.

means. Dr. Carmichael suggested that the solution used by Miss C was too sensitive to give results of any value.¹³¹

Carmichael had used the Wasserman test to confirm diagnosis of General Paralysis of the Insane (GPI), a condition appearing in advanced stages of syphilis. Thus by standardising the gold solution using cerebrospinal fluid from GPI patients as a control, Carmichael and Greenfield could be sure that they were producing results. The curve produced in a patient without GPI would be the normal control and would demonstrate that the test worked. Logically, if CSF from patients with disseminated sclerosis produced a unique curve relative to the controls, they would have confirmed Chevassut's results. Yet, Carmichael reported failure. However, his result did not disprove Chevassut's claim; at best, all that using different solutions and methods of standardisation proved, was that Carmichael and Greenfield's results varied from her own.

Carmichael challenged other technical aspects of her work: he had been unable to receive reliable pH readings with the bubbling hydrogen meter she used and suggested that the hydrogen electrode was not adequate to the task.¹³² Chevassut rejoined that it was a matter of practice, testily insinuating that the issue was Carmichael's competence. Carmichael's next criticism was less of a shock, but Joseph Barnard's added comment was a catastrophe.

¹³¹ NA, FD1/2747 Chevassut II, Memorandum of meeting held at 38 Old Queen Street on Friday 19th December 1930 (not my interpolation).

¹³² Ibid.

Carmichael had ‘cultured’ 19 fluids from declared cases of disseminated sclerosis and had seen no evidence of a ‘spherule’. Mr Barnard had personally examined 9 of those fluids without success. Mr Barnard referred to his original assistance to Miss Chevassut. He said that all he had stated was that in some of the cultures shown to him he saw an appearance different to anything he had seen before when working with the same technique: he was not prepared to say that this was characteristic of DS or implied a living virus.¹³³

Barnard’s qualification must have been bewildering, mainly because Chevassut had frequently admitted there was no reason to suspect the organism was causative, a charge, it should be remembered, she had levelled against Purves Stewart’s vaccination experiments – he had also edited her published paper. She could easily explain Carmichael’s inability to detect the organism, because he had not managed to confirm any of her results at all, but Barnard’s *volte-face* undermined everything. The final blow, however, was still to come.

Professor Elliott referred to Miss Chevassut’s failure to repeat her work when supplied by the neurologists present with unknown fluids from different sources. 32 fluids had been sent to her, 14 of which came from patients with disseminated sclerosis. 2 of these were returned as ‘contaminated’ the others were all ‘negative’. Only one fluid had been returned as ‘positive’ and that came from a child with chorea.¹³⁴

¹³³ Ibid.

¹³⁴ Ibid.

Chevassut, Elliott suggested, had exaggerated the case for her experiments. Chevassut admitted the validity of many of these points, but, perhaps remembering her earlier research work, deftly deflected the criticisms. Over time, she knew, the pH of cerebrospinal fluid became more alkaline. Even an hour in transit between hospitals or from the bedside to a laboratory might kill the organism. She then pointed out in a rebuttal to Carmichael: ‘often, she said, she got negative cultures “for months on end.” It might be necessary in a given case of DS to examine 5 or 6 specimens of fluid before ultimately obtaining a “positive” culture.’ Additionally, she pointed out that Henry Cohen (1899-1977), a young neurologist at the Liverpool Royal Infirmary, had repeated her experiments ‘on a large series of cases of disseminated sclerosis at the Ministry of Pensions Hospital there. They had obtained “positive cultures” in nearly 100% cases of D.S., and in none of equal numbers of controls.’ Moreover, she had visited Liverpool and seen them for herself.¹³⁵

Unable to contest her defence, it was finally proposed that Chevassut move from the Westminster Hospital to the National Hospital – there she would have the materials, equipment, and proximity to patients necessary to settle the questions once and for all.¹³⁶ To this Chevassut agreed, but there is evidence suggesting that she was unhappy with this suggestion, and this may have been because there were other great stresses in her life at the time, for her father was seriously ill and she was acting as his carer.¹³⁷ The deciding

¹³⁵ NA, FD1/2747 Chevassut II, 1573 Transcript, 10 Oct. 1930.

¹³⁶ NA, FD1/2747 Chevassut II, Memorandum of meeting held at 38 Old Queen Street on Friday 19th December 1930.

¹³⁷ See, for instance, NA, FD1/2748 Chevassut III, F G Chevassut to Fletcher, c. December 1930 or January 1931.

factor, however, was another round of devastating criticisms on her research by Carmichael at the Neurological Section of the Royal Society of Medicine in January 1931.¹³⁸ At this meeting, Carmichael's critique was merciless, and though Purves Stewart and Chevassut were given opportunities to respond, most present, sided with Carmichael. Chevassut was remembered to have left the meeting in tears, not to be 'encountered in neurological circles again' – no doubt this experience was embittering.¹³⁹

I think it likely that it was then that Chevassut felt her situation was impossible. Even if she moved to Queen Square, would anyone believe in her or be helpful? She eventually informed the MRC that she could not continue there or at the Westminster Hospital. At that point, Purves Stewart officially disassociated himself from her work, begging his colleagues to believe she had misled him.¹⁴⁰ Yet, all was not over, for Chevassut still had one more important role to play, a role that would eventually lead to the formation of the Neurological Research Unit at the National Hospital.

Institutional Covers, Contexts, and Pretexts: Practices and their Social Orders

Not long after Purves Stewart abandoned Chevassut, a letter appeared in *The British Medical Journal* by a young physician named Barnard Halley Stewart, recently appointed in charge of his father's philanthropic foundation, the Halley Stewart Trust, which was

¹³⁸ Edward Carmichael, "The Aetiology of Disseminated Sclerosis: Some criticisms of recent work, especially with regard to 'Spherula Insularis'" *PRSM* Volume 24 (1931), pp. 591-606; draft and correspondence also available in NA, FD 1/2748 Chevassut III.

¹³⁹ Alastair Compston, "The story of multiple sclerosis" in George Ebers, Hans Lassmann, Ian McDonald, Bryan Mathews, Hartmut Wekerle eds. *McApline's Multiple Sclerosis*, p. 33.

¹⁴⁰ [Private Collection], Edwin Bramwell, Diary Entry, 13 Oct. 1934, Volume 1, 33-43; James Purves Stewart, "Disseminated Sclerosis: Experimental Vaccine Treatment" *The Lancet* (1931), pp. 440-441.

founded to support scientific and medical research.¹⁴¹ In his letter, Halley Stewart asked philosophically whether Carmichael's denouncement had done anything other than to raise questions. In his view, Chevassut's research had been important, and yet still no one knew whether her work had been a waste of time and resources, or whether an actual discovery of a pathogenic organism. Carmichael, Halley Stewart argued, had not addressed this in his paper before the Neurological Section. Such questions, led him to declare the remarkable decision of continuing to support her research by providing her facilities and a salary for research. Consequently, his letter was to announce a grant of £10,000 to secure and equip laboratory facilities in a small house the Trust had purchased for this purpose, 30 Chesterford Gardens.¹⁴²

Not surprisingly, many received the Halley Stewart Trust's decision to support Chevassut with great scepticism; the last thing that should happen, many felt, was the continuation of this research.¹⁴³ For his part, Francis Walshe could not sit by apathetically. A caustic conservative, and medical correspondent to the Catholic *Herald* and *The Tablet*, it had once been alleged that his remarks had something in common with 'a howitzer' in that they 'aimed at nothing on earth' but landed 'quite specifically'.¹⁴⁴ Writing a series of condemnatory letters to Barnard Halley Stewart, he eventually finished:

¹⁴¹ Bernard Halley Stewart, *BMJ*, 14 March 1931, p. 474. Also see the notice, "Halley Stewart", *The Lancet*, 6 February 1937, p. 336.

¹⁴² *Ibid.*

¹⁴³ See all of the letters in NA FD 1/2750 Chevassut IV.

¹⁴⁴ Gregg to John Fulton, 18 February 1933, 401A Cairns, Hugh (Neurosurgery) 1933-1938, RAC; see generally, UCL Francis Walshe Papers.

Your letter almost convinces me that I have been entertaining a humorist unawares...It is clearly quite futile for us to discuss this matter further...for as far as this research is concerned you are living in a world of fantasy in which I can make no contact with you. I fear that you may be inclined to take this view of mine somewhat amiss, but I would ask you to suspend judgment for a twelvemonth. Then re-read your letter of the 29th and my reply. I wager that by then we shall be marvellously in agreement in believing that feminine charm and inconsequence and a light-hearted disregard of accuracy are fatal endowments for one engaged in scientific research.¹⁴⁵

The Halley Stewart Trust quickly reached this conclusion themselves, although *why* is not clear at all from the record.¹⁴⁶ In late June of 1931, Fletcher wrote to Chevassut's brother that Halley Stewart Sr had come to see him:

The old man himself, who was completely unknown to me, gave a surprise visit last week and explained that he was thoroughly dissatisfied with the whole business by this time, and suggested we should take it over from him. He then learned for the first time all that we had previously done. I believe the Trustees are meeting to-day and will come to some decision...I am afraid it is become pretty plain that she was receiving money or promises of money from the Trustees while taking our research grant from public funds, of which an essential condition of course was that she should not receive money from other sources without our knowledge. In any case, she concealed altogether from the Trustees, when leading them into an expenditure of about £10,000, the previous help and opportunities we had given her. I think the various interpretations you give of her conduct

¹⁴⁵ NA, FD 1/2750 Chevassut IV, Walshe to Halley Stewart, Jr 30 March 1931.

¹⁴⁶ See, Bernard Halley Stewart, *BMJ*, 14 March 1931, p. 474.

can be easily extended without any undue charity to cover these lapses, but it looks bad from outside. Much the best thing she can do now is give-up this wild-goose chase, swallow the pride, which should never have been aroused, and go back to her medical work. I have nothing but commiseration for her. But I feel very strong resentment against Purves-Stewart and others at the Westminster Hospital.¹⁴⁷

The record contradicts many of Fletcher's previous comments. It is not clear why Halley Stewart Sr would have claimed to not know that the MRC had supported Chevassut's research. Everything Chevassut had published stated that the Medical Research Council had supported her. Similarly, a newspaper clipping referred to the fact. Thus, her relationship with the MRC was public knowledge. Neither did Fletcher offer evidence for the claim that she had been accepting money or promises of money, and he certainly did not warn her that she should not accept assistance from others when she informed him that a 'Trust' had offered some assistance (such a warning would have been kept in these files had it existed). Moreover the caveat that she might have accepted promises of money seems altogether disingenuous; Carmichael, for example, later was always looking for additional funds for research. In the end, Fletcher blamed her for pride in a wild-goose chase only, and his resentment against others' treatment of her seems heartfelt. However, it is difficult not also to see some utilitarian logic underlying Fletcher's actions, and it is interesting that records indicate that he met with Halley Stewart Sr occasionally throughout 1931.¹⁴⁸

¹⁴⁷ NA, FD 1/2750 Chevassut IV, Fletcher to Frederick Chevassut, 24 June 1931.

¹⁴⁸ See various letters in NA, FD 1/2750 Chevassut V.

By January of 1932, Chevassut was no longer working for the Halley Stewart Trust, and she disappears completely from the historical record. Shortly after she resigned, Fletcher wrote to Walshe asking him and Edward Carmichael to prepare a scheme for 30 Chesterford Gardens so, he wryly remarked, that the Trustees should not have to ‘scrap all the beautiful equipment’ and ‘throw away what has in all cost them about £12,000’. He added, ‘You and Carmichael both spoke of investigating disseminated sclerosis or other diseases and of using that place, perhaps, as a kind of research annexe linked with Queen Square.’¹⁴⁹ Walshe was enthusiastic.¹⁵⁰ He and Carmichael discussed Fletcher’s proposal and concluded that further research on disseminated sclerosis would not be profitable. According to Walshe, Carmichael was the ideal man for the job but required full autonomy so that he could be relieved from ‘hack work of the most demoralizing kind’ in Francis Fraser’s laboratory at St. Bartholomew’s Hospital. Both Carmichael and Walshe claimed to be distrustful of ‘a scheme that would make Chesterford Gardens any kind of annexe to Queen Square.’¹⁵¹ Comments Walshe later made suggest that he was worrying that attaching a research institute to the hospital would decrease prospects for receiving funding from the Rockefeller Foundation.¹⁵²

By February 1932, Fletcher had received Walshe and Carmichael’s proposal. Noting that pathological and bacteriological research in neurology was becoming fairly common, they argued that biochemical and metabolic studies of the nervous system had not really

¹⁴⁹ NA, FD 1/2751 Chesterford Gardens, Fletcher to Walshe, 23 January 1932.

¹⁵⁰ NA, FD 1/2751 Chesterford Gardens, Walshe to Fletcher, 25 January 1932.

¹⁵¹ NA, FD 1/2751 Chesterford Gardens, Walshe to Fletcher, 27 January 1932.

¹⁵² NA, FD 1/2751 Chesterford Gardens, Walshe to Fletcher, 11 May 1932.

commenced anywhere in Britain. Clinical material was always ready for investigation, but many problems still required deliberation, including metabolic, biochemical, and physiological research on spinal cords showing signs of sub-acute combined degeneration. 'The organisation for such research' Walshe and Carmichael owned, 'is already available as it is being undertaken in the out-patient department at Queen Square on Saturdays. The facilities there are not good and it is impossible to control to the same extent as if the subjects were in-patients...the work is not perfect owing to lack of facilities.'¹⁵³ There were similar problems for research in myopathies, epilepsy, myasthenia gravis, and finally the ever-present problem of disseminated sclerosis. In order for the research to run efficiently, Carmichael and Walshe felt that the facilities would require a minimum of ten beds, nursing staff, and kitchens. In addition, it would need a fulltime neurologist, a dietician, a qualified medical officer with laboratory expertise, and possibly a trained biochemist, an expenditure that would be amply repaid, 'as investigation into the biochemistry of nervous diseases has not yet been undertaken.'¹⁵⁴

This proposal for a research institute was genuinely remarkable in the context of British neurology. Not only was it unprecedented in Britain, but, had it been realised, it would have been one of very few of its kind in the service of neurology the world over.¹⁵⁵ The proposal was also strategic. Walshe was now planning proposals to the Rockefeller

¹⁵³ NA, FD 1/2751 Chesterford Gardens, Edward Carmichael [it was co-authored with Francis Walshe see the letter cited below], Proposal for Research Scheme Chesterford Gardens, received 1 February 1932, p. 1-3, 1; Walshe to Fletcher, 30 January 1932.

¹⁵⁴ *Ibid*, 2.

¹⁵⁵ John Green, "The Origins of Neurological Institutes" pp. 127, 147, 159, 176.

Foundation and was applying for a grant to support teaching and research for recently acquired space at the National Hospital.¹⁵⁶ Had they informed the Halley Stewart Trust of these developments, it is likely the Trust would have been less interested in supporting neurology. Yet, the Rockefeller Foundation proposal was a long-shot, and the facilities at Chesterford Gardens Institute were already in place. In the best of possible worlds, the neurologists might acquire both.

Before Fletcher could continue negotiations with the Halley Stewart Trust, he became seriously ill, and proposals for the Chesterford Gardens project lapsed for a few months while he was recuperating (he never fully recovered).¹⁵⁷ By the time Fletcher returned, Walshe was blue about the prospects of major funding at the National Hospital, and it was becoming less important that the projects be separate. 'I should like to ask,' he wrote Fletcher despondently,

that if at any time you see the way clear for the establishment at Queen Square of a research unit, you will let me know so that our chances there may not be lost for lack of our knowing when to take them. Flexner was so disapproving of English medical educational methods last night that my hopes of some aid from the Rockefeller Foundation dwindled sadly away.¹⁵⁸

¹⁵⁶ Daniel P O'Brien, Diary excerpt 12 March 1932, folder 265, box 20, series 401, 1.1, RAC.

¹⁵⁷ NA, FD 1/2751 Chesterford Gardens, Thompson to Carmichael and to Halley Stewart, 24 March 1932.

¹⁵⁸ NA, FD 1/2751 Chesterford Gardens, Walshe to Fletcher, 11 May 1932.

In effect, Walshe was proposing the creation of what would become the MRC Research Unit at the National Hospital. Walshe's suggestion was not without promising possibilities, and Fletcher was soon disappointed to learn that legalities prevented 30 Chesterford Gardens from housing the patients necessary for clinical research.¹⁵⁹ Moreover, Halley Stewart Sr was adamant that the facility be used for research only and was concerned Walshe and Carmichael intended it as a convalescent home.¹⁶⁰ Eventually Halley Stewart proposed the Trust support one or two researchers with fellowships in neurology instead.

Halley Stewart's suggestion delighted Fletcher. Though there was something dissatisfying about losing the research facilities at Chesterford Gardens, without space for patients, he admitted, the entire place was bound to be 'futile' for clinical research and 'extravagant'. He finished by suggesting Carmichael would be an appropriate candidate for funding. 'He is a highly trained neurologist and really cares for nothing but research. He is now at the parting of ways and must either get some stable research position or allow his consulting practice to grow.'¹⁶¹

To Fletcher, care of Carmichael's research career was very important, and he was not the only one with this opinion. Two days later he received a letter confirming that many neurologists at Queen Square were of the same view.¹⁶² Likewise, Daniel O'Brien, the

¹⁵⁹ NA, FD 1/2751 Chesterford Gardens, Halley Stewart to Fletcher, 16 June 1932.

¹⁶⁰ NA, FD 1/2751 Chesterford Gardens, Fletcher to Walshe, 28 June 1932.

¹⁶¹ NA, FD 1/2751 Chesterford Gardens, Fletcher to Halley Stewart, 12 July 1932.

¹⁶² NA, FD 1/2413 Queen Square Neurology, Collier to Fletcher 14 July 1932.

Rockefeller Foundation European authority on science, mentioned in a letter at the same time, that he thought Carmichael of ‘unusual promise and exceptional ability’, because he was a member of a ‘younger group who are anxious to develop the scientific side of neurology’.¹⁶³ Later, an author of a *London Times* article, citing Thomas Lewis’s program for clinical research – Lewis was one of Carmichael’s leading supporters – noted that ‘the National Hospital for Nervous Diseases, Queen Square’ was promoting ‘clinical research in such a way as to open careers to younger workers.’¹⁶⁴ Research aid to neurology, from either the MRC or the Rockefeller Foundation, was being demarcated along these modern clinical research lines. Carmichael’s professional ambitions fit within that paradigm. Founding a clinical neurological research unit, as Walshe proposed, with Carmichael as a Director, was an appropriate, if expensive, solution for retaining him in neurologic research permanently; nonetheless, Halley Stewart’s proposal for research fellowships in neurology ultimately improved the overall funding prospects.¹⁶⁵

In July 1932, it was still unclear where Carmichael would end up. His position at St. Bartholomew’s Hospital and an appointment at the National Hospital were typical of a neurologist about to set out into private practice, and this had created some anxiety that he would be ‘lost’. This many determined to prevent; Carmichael had expressed a desire to continue in neurological research, and almost everyone was attempting to find him the funds, facilities, and the position he desired.

¹⁶³ Daniel P O’Brien, Diary excerpt 11 March 1932, A National Hospital for Nervous Diseases, 1930-1933, folder 265, box 20, series 401, 1.1 RAC.

¹⁶⁴ “Research in Medicine Study of Food and Viruses” *Times* (London), 2 March 1933, 14, issue 46382, col. C.

¹⁶⁵ See Appendix C, Chart C10 for a list of this fellowship’s winners.

By the mid-July 1932, the National Hospital, concerned that their hopes for major philanthropic funding for research were not going to materialize from any of the major foundations, drafted a proposal to MRC suggesting the founding of a Clinical Neurological Research Unit at the Hospital.¹⁶⁶ A hospital sub-committee proposed that the medical research unit be 'established immediately'. The hospital would pay for twenty beds, the services of a medical assistant, laboratory technician, and one house physician from the hospital. 'Dr Carmichael would of course be the Physician chosen as Director.'¹⁶⁷ The National Hospital's proposal for the Medical Research Unit had been wrangled by Francis Walshe, who was aware that Thomas Lewis's post at University College Hospital, which had been formerly supported by the Medical Research Council, was about to be permanently endowed by a capital grant from the Rockefeller Foundation, thus freeing up MRC funds.¹⁶⁸

Meanwhile Carmichael reported to the MRC that he had toured the Chesterford Gardens Facility with Halley Stewart, Jr, and been awestruck by how 'superbly equipped with apparatus' it was and had suggested that the 'fittings and equipment could well be transferred to' Queen Square.¹⁶⁹ Halley Stewart Sr took to this proposal. Suggesting that the MRC receive a supplementary grant from the Halley Stewart Trust for Carmichael because 'we naturally shrink from direct responsibility', he added that Carmichael's

¹⁶⁶ NA, FD 1/2751 Chesterford Gardens, Walshe to Fletcher, 11 May 1932.

¹⁶⁷ NA, FD 1/2413 Queen Square Neurology, Collier to Fletcher 14 July 1932.

¹⁶⁸ See, for example, NA, FD 1/2413 Queen Square Neurology, Enclosure from Collier to Fletcher, 21 July 1932, *Proposal for a Unit of the Medical Research Council at the National Hospital* pp. 1-2.

¹⁶⁹ NA, FD 1/2751 Chesterford Gardens, Personal note, Phone Transcript, 23 August 1932.

suggestion had come to him 'like plank pushed to a drowning man' and proposed that the MRC care for Carmichael completely and support him through a liberal grant from the Trust.¹⁷⁰

The state of affairs must have been perfect from Fletcher's perspective. By agreeing partially to support Carmichael and by relinquishing much of their laboratory apparatus to the prospective Queen Square Laboratory, the Halley Stewart Trust had substantially improved the financial situation for the Unit at Queen Square. Halley Stewart and his son visited Fletcher in late September.¹⁷¹ They discussed the plans for the new Unit, and Fletcher offered some advice on disposing of Chesterford Gardens. (They eventually gave the property to the University of London as a facility for physics research.¹⁷²) Halley Stewart Sr suggested a permanent supplemental endowment of £200 per annum to Carmichael.¹⁷³ He hinted that other funds might be available for research fellowships.¹⁷⁴ By the 17th of October 1932, the proposal to form the Clinical Research Unit was before the Medical Research Council. Carmichael's position in the first instance was probationary, and included a whole-time grant for his salary and additional funds to

¹⁷⁰ NA, FD 1/2751 Chesterford Gardens, Halley Stewart, Sr to Fletcher, 23 August 1932, Fletcher to Halley Stewart, 31 August 1932; Halley Stewart to Fletcher, 3 September 1932.

¹⁷¹ NA, FD 1/2751 Chesterford Gardens, Fletcher to Halley Stewart, 22 September 1932.

¹⁷² "University News," *The Times* (London) 20 April 1933, 8.

¹⁷³ NA, FD 1/2413 Queen Square Neurology, Proposal for a Research Unit at the National Hospital, Queen Square, 17 October 1932, pp. 1-3.

¹⁷⁴ NA, FD 1/2413 Queen Square Neurology, Fletcher to Halley Stewart, Sr, 1 November 1932.

support the laboratory for five years.¹⁷⁵ The Council then fully supported the National Hospital's proposal, and the Clinical Neurological Research Unit was established.¹⁷⁶

Fletcher wrote to Halley Stewart telling him of Carmichael's recent appointment to the new institute. Mentioning the financial limitations the MRC currently faced, Fletcher promised that any additional investment the Trust might make in Carmichael would not limit that which the Council was prepared to give.

I confess to a belief that it may mark a new era in the scientific study of nervous diseases in this country. Nothing of the kind is being done or attempted anywhere else at present. I do not think the Halley Stewart Trustees are ever likely to regret an active association with the project at its start.¹⁷⁷

Halley Stewart Sr agreed and proposed establishing 'a Student Research Scholarship supplemented by the Trust for three years at £200, £225, and £250 per annum.'¹⁷⁸

Fletcher replied, 'If this were found possible, it would not only bring aid to the right kind of man, but by doing so aid the progress of the whole scheme.'¹⁷⁹ Shortly thereafter, the MRC announced the Halley-Stewart Research Fellowship, and by February of 1933,

¹⁷⁵ NA, FD 1/2413 Queen Square Neurology, Proposal for a Research Unit at the National Hospital, Queen Square, 17 October 1932, pp. 1-3.

¹⁷⁶ NA, FD 1/2413 Queen Square Neurology, Collier to Fletcher, 31 October 1932; Hamilton to Fletcher, 9 November 1932.

¹⁷⁷ NA, FD 1/2413 Queen Square Neurology, My emphasis. Fletcher to Halley Stewart, 1 November 1932.

¹⁷⁸ NA, FD 1/2413 Queen Square Neurology, Halley Stewart to Fletcher, 3 November 1932.

¹⁷⁹ NA, FD 1/2413 Queen Square Neurology, Fletcher to Halley Stewart, 10 November 1932.

candidates were applying for funds.¹⁸⁰ With the foundation of this Unit, neurological research in Britain became some of the best supported in the World, and with the Rockefeller award in 1935, it surpassed all other programs, save that in Montreal. In short, by 1933, British neurology had passed through a metamorphosis. Where before neurology was marked by contingency and fluidity in definition, now it had been given a new, precise institutional structure; and yet, it nevertheless cleverly incorporated all its past ambiguities in practice beneath the cover of that institution.

Conclusion

In many ways, this chapter has been both a story of progress and triumph, as well as an account of individual tragedy. Undoubtedly the establishment of the MRC Neurological Research Unit marked a turning point in the history of British neurology. Under Carmichael's Directorship, the Unit became a leading neurological centre in the world – students, researchers, and physicians eventually came there from all over the globe. Yet, the origins of this institute reveal the prior status of neurological practices in Britain. Though the War had caused social transformation in how neurology was perceived generally, interwar neurology remained marked by ambiguities, especially in its idiomatic social modes of operation. While the rise of this new institute hailed the formation of a new administrative paradigm, beneath its cover were hidden neurology's broader social and political problems. Perhaps the case of Kathleen Chevassut and James Purves Stewart intensified these, but perhaps not.

¹⁸⁰ NA, FD 1/2413 Queen Square Neurology, Fletcher to Halley Stewart, 14 December 1932.

Were Chevassut and Purves Stewart such villains; was Chevassut so scientifically incompetent? Certainly, Purves Stewart's actions seem disquieting. Indeed, it is tempting to script this sorry episode into a narrative of betrayal, sexism, and greed, to follow the relentless pattern of retrospective analysis and affirm Purves Stewart's status as a medical advertiser, self-promoter, and add the word chauvinist. Similarly, it is easy to accuse Chevassut of a too-naïve faith in her talents, analytical abilities and results. But if we begin this pattern then it is necessary to admit that Joseph Barnard edited Chevassut's first publication, that Fletcher was clearly not above reproach, and that T R Elliott's and Francis Walshe's comments placed Chevassut's sex at the heart of their personal attacks on her. Would it be incorrect to see advantages for Edward Carmichael in discrediting her work? Or blame the lay press for transforming small, if promising, results into a 'cure' for desperately ill-patients?

We could continue here, but what is striking about these events is how little power everyone seems to have had in the face of both the disease's uncertainty and the structures of functioning power and order. Broader considerations are required for understanding the underlying contingencies of this story. Nervous diseases like disseminated sclerosis were intractable, ambiguous conditions often of unknown aetiology to which the promises of 'biomedicine' held out new hopes. Yet, the consultants who might turn those hopes into realities were supposed to treat patients, teach medical students, participate in hospital administration, be active in medical societies, attain the capital befitting the class structures and norms of British society and culture, and still find time for private lives. Professional expertise, always defined broadly in

British medicine, in this context acquired a deeper perplexing dimension. Not only were the practices of medicine at the bedside and of medicine in the laboratory in conflict, but dynamically each also created temptations in the practices of the other.¹⁸¹ In a medical economy in which attainments in science brought clients for the physicians and attainments in medicine might bring State or philanthropic funding, hope alone might jeopardise or blind practitioners to the merits of their work. Nor was this economy one affecting individuals alone, for in times of financial hardship (such as the global recession of the 1930s) funding bodies like the MRC could ill-afford the publicity of scandal or the inefficiencies of scientific whimsy: too much was at stake. A middle-ground between the experience of the realities of bedside practice and the realities of making scientific knowledge was required to defuse temptation and hope. Institutions bridging medical practice and the practices of science were incremental in establishing new limitations within medicine. At the bedside, medical practices remained mediated by a personal relationship, but in the clinical laboratory, by contrast, practices became mediated by a relationship to larger institutions and structures. Those institutions and structures introduced limitations in research, practice, and the pursuit of knowledge, and in consequence, restricted the practices of physicians at the bedside.

There is no reason to create a hagiographic portrait of Kathleen Chevassut, but in retrospect, her existence, as well as the resentments against Purves Stewart, are revealing of a deeper moral dilemmas within clinical research in this period. The *coup de grace* to Chevassut's career was simply association with Purves Stewart. She was thus not so

¹⁸¹ See the letter, A C Ransom and Hugh Smith, "Aetiology of Disseminated Sclerosis", *The Lancet*, p. 751.

much a scapegoat but rather a weapon; a stone that the medical establishment cast at one of their number. Purves Stewart was an embarrassing sign of neurology's, and (more generally) medicine's juridical inadequacy – he resigned his post at the Westminster Hospital because of his involvement.¹⁸² Bramwell wrote apropos this affair:

When staying at Oxford with Farquhar Buzzard in July, Wilfred Harris was also staying in the house; we three sat up talking late one evening after the dinner of the Association of British Neurologists, and when Purves Stewart's name came up, I tried to make excuses for him, pointing to his upbringing and so on. Buzzard and Harris, however, would not hear a word in his favour, and a recent incident shows me that they are right. I had thought that Stewart had abandoned the treatment of disseminated sclerosis by vaccines, but a few weeks ago [1934] I had a letter from Dr Ross Haddon...in which he told me that a patient of his, a lad of 20, was being treated by Purves Stewart for disseminated sclerosis with vaccines, and that the lad's mother, a Scottish minister's wife, in whose case I had diagnosed disseminated sclerosis, wanted to know whether I would advise her to go to London and have the same treatment? ...Stewart was charging the boy, a minister's son, fifteen guineas each time he went up to London. There is, of course, just a possibility that Purves Stewart may have found an organism in the cerebrospinal fluid but this has never been confirmed, and under the circumstance he had no right I think to charge a fee. Scandalous! What can one do with a man like this?¹⁸³

¹⁸² J G Humble and Peter Hansell, *Westminster Hospital, 1716-1966* (London: Pitman Medical Publishing, 1966), p. 98. Also see, F D M Hocking and James Purves Stewart, "Disseminated Sclerosis: Clinical and Serological Observations During Experimental Vaccine Treatment" *The Lancet*, 19 March 1932, pp. 605-610. Cf. Purves Stewart's account of his resignation in *Sands of Time*.

¹⁸³ [Private Collection] Edwin Bramwell, Diary Entry, 13 Oct. 1934, pp. 40-41, Volume 1.

The new Research Unit would safeguard neurology from practices like these, and thus prevent the incipient exploitation of patients the rise of the laboratory could easily tempt. From this perspective, the institutional 'flowering' of neurology that occurred in 1930s London, inclusive of the money and new status it brought the field, was also a deeply protectionist move of the older medical world. The institutionalization of neurological research was thus a necessary change to protect the medical specialty's integrity. It had come at a limited cost: the exclusion of one man and the destruction of a single woman, and the latter had inadvertently created the conditions for a positive resolution. The next chapter places this episode in the context of the contemporary international changes in neurology, and examines the rift ultimately leading to the formation of the Association of British Neurologists.

CHAPTER 6

The Practice of Prosopopoeia: the Production of the Neurological Field

‘a purple patch’¹

Introduction

It should now be apparent that numerous social, cultural, and political stories converge around the practices of neurology in interwar Britain. What is more, these stories often derived from the dichotomies of that period: art versus science, peace after total war, craftsmanship versus mechanical reproduction, economic or social liberalism, modernity against tradition, reductionism versus naturalism; these were but a few tensions now visible in that milieu.² These stories produced idiomatic social processes of reaction and accommodation within neurological practice.³ The forging of ideological consensus over the structures of neurologic practice – i.e. the defining of neurology’s social field – thus required incorporation of past ambiguities into the changing rubrics of the age. Some of these included celebrations of past neurological pioneers and continuing efforts to associate neurology with physiology and general medicine. Most interesting among these,

¹ In its original form, this idiom referred to an especially brilliant section of prose. However, it has recently become derogatory. It now suggests that someone’s prose is too elaborate and theoretical, and not factual.

² Modris Ekstein, *Rites of Spring*; Ronald Blythe, *The Age of Illusion*; Robert Rhodes James, *The British Revolution*, pp. 281-584; David Cantor ed. *Reinventing Hippocrates* (Ashgate, 2002); Weisz and Lawrence eds. *Great than the Parts*; Christopher Lawrence and Anna-K. Mayer, *Regenerating England: Science, Medicine, and Culture in Interwar Britain* (Amsterdam: Rodopi, 2000); Eric Hobsbawm, *Age of Extremes*, pp. 85-222; Piers Hale, “Labor and the Human Relationship with Nature: The Naturalization of Politics in the Work of Thomas Huxley, Hebert George Wells, and William Morris” *Journal of the History of Biology* Vol. 36, (2003), pp. 249-284; Barry Eichengreen, “Unemployment in Interwar Britain” *Refresh* Vol. 8 (1989): 1-4. Walter Greenwood, *Love on the Dole* (Vintage Books, 2004).

³ The terms are from Andrew Pickering, *The Mangle of Practice: Time, Agency, and Science* (Chicago: University of Chicago Press, 1995).

however, was the initiation and function of international neurological congresses, which began in 1931 and effectively culminated in the formation of the World Federation of Neurology in 1957.⁴ These more than the others substantiated British neurology professionally in new ways.

At the same time, international efforts were fraught with opposing influences. Though various national neurological societies represented neurology across the world, in each domestic context, neurology's definition dissolved between differing perspectives about knowledge and uncertain institutional circumstances.⁵ For example, divergent epistemological discourses broke between materialist and idealist conceptions of brain and mind, and environmentalist (biosocial) and genetic determinist (eugenic) models of nervous and mental diseases.⁶ The occupational practices of individuals were a mishmash of neuropsychiatric, neurologic, neurosurgical, and psychological methods. Moreover, institutional ambiguities matched this diversity.⁷ In Britain, for instance, most physicians with interests in nervous diseases remained associated with general medicine in the

⁴ John Walton, *The Spice of Life: From Northumbria to World Neurology* (London and New York: Royal Society of Medicine, 1993), 573-588.

⁵ Peter Koehler, "The Evolution of British Neurology" in *A Short History of Neurology*; also see F. Clifford Rose ed. *Twentieth Century Neurology: the British Contribution*; Russell DeJong, *A History of American Neurology*; Jesse F Ballenger, *Self, Senility, and Alzheimer's Disease in Modern America: a history* (Baltimore: Johns Hopkins Press, 2006), pp. 50-51.

⁶ See Edward Shorter, *A History of Psychiatry*; Anne Harrington, "A feeling for the 'whole': the holistic reaction in neurology from the fin de siècle to the interwar years" in *Fin de Siècle and its Legacy* (Cambridge, 1990), pp. 254-277; Roger Smith, *Human Sciences*, see his chapter on Psychological Society.

⁷ Jack Pressman, *Last Resort*; Russell DeJong, *A History of American Neurology*; H. Houston Merritt, "Horizons in Neurological Sciences: Neurology", pp. 41-48.

teaching or voluntary hospital systems. Importantly, these institutional conditions were ones generally reflected for neurology throughout the Western world.

In this patchwork quilt of local practices and divergent epistemological positions in Britain and abroad, the challenges to creating a unified field of neurology were tremendous, but the advantages immediately perceptible. In the not so distant past, neurologists had conducted research without formal support. Gordon Holmes, as Macdonald Critchley recalled, had:

advanced knowledge...without any outside assistance, financial or otherwise. Not only did he never have a department, he was not even afforded the privacy of a room or office in the hospital...His researches had to be carried out in the open wards, and at home in his own time working far into the night.⁸

The advantages disciplinary unification offered neurology were correctives to circumstances exactly like these. The appearance of unity, for example, might promote (and certainly legitimated) the formation of new hospital and research departments for neurology; bring research and capital endowments for the specialty; and increase the overall population of its clinical practitioners, researchers, and students.⁹ As the preceding chapter suggested, the new interwar ethos favouring the rationalisation of research had already begun creating such opportunities for neurology. Yet, the future possibility of additional opportunities necessitated processes of accommodation with this

⁸ Macdonald Critchley, "Gordon Holmes: The Man and the Neurologist", p. 233.

⁹ See Chapter 7 for a discussion of this in Britain.

new administrative ethos, operations that in turn demanded rejecting the traditional, normative values of medical practice, such as generalist medical competence.

In Britain, constructing disciplinary unity in neurology demanded abandoning traditional values of medical practice. Here Henry Head's Presidential Address (see chapter 4) to the Neurological Section of the Royal Society of Medicine in 1918 was prescient, for he had suggested that discarding those ideals would be a necessary requirement for neurology's progress. Only a few months following his address, and marking the beginning of the Section's retreat from generalist medical values, a modest movement to internationalise neurology began, and at the same time, its Council created a directory of neurologists for a never-realised 'National Union of Neurologists'.¹⁰

Why did this movement towards internationalism occur? Certainly, this was part of the contemporary political trend promoting organisations working towards international conciliation, such as the League of Nations. Yet, internationalism for interwar neurologists offered something more. The international sphere was an ideal space for creating disciplinary and epistemological unity: an ideal space of solidarity that therefore could be used to negotiate with the vicissitudes and obstinacies of domestic medical cultures. In other words, international solidarity embraced the appearance of definitional stability, while concealing domestic uncertainties within pluralist rubrics of national differences and styles. In concrete terms, international meetings of neurologists created determinant spaces for clinicians representative of a host of practices and disciplines to

¹⁰ RSMA, K73, Council Minutes, 18 December 1919, page 160; 28 October 1920, p. 172.

occupy. These various practices were assimilated into neurology's fold, creating an international field symbolising the unity of neurologic practitioners in all nations and one to which domestic national appeals for legitimacy – political, social, or otherwise – could be made.

However, this internationalist approbation of domestic pluralities was not without its drawbacks. Superficially, one problem such international spaces created was establishing personal trust among men representative of such diverse practices and institutions, as well as such various political and cultural orders.¹¹ With, for example, the political circumstances of the world increasingly polarised by economic chaos, the rise of communism in the Soviet Union, and the still rampant general distrust among formerly belligerent nations, most sensed that individual feelings of trust were painfully naïve indicators of character.¹² Whatever trust could be established between men, it nonetheless functioned rather cursorily under these circumstances.¹³ At best, conviviality and cordiality, nostalgia for the iconic figures of the past, and the conspicuous (though tasteful) consumption marking the bourgeois lifestyle, supplicated for trust. Taste was after all measure of something and could serve as an effective if idiomatic unifier. Thus,

¹¹ Cf. Steven Shapin, *A Social History of Truth: Civility and Science in Seventeenth Century England* (Chicago and London: University of Chicago Press, 1994), pp. 65-125, 409-417. Christopher Lawrence and Steven Shapin, ed. *Science Incarnate: Historical Embodiments of Natural Knowledge* (Chicago and London: University of Chicago Press).

¹² Mazower, *Dark Continent*, pp. 40-128.

¹³ Neurologists were politically involved figures within their domestic establishments. Foster Kennedy, for one, was President Franklin Roosevelt's physician. One of Harvey Cushing's daughters was married to one of Roosevelt's sons. The neurologist Otfried Foerster attended V. I. Lenin in his final illness. W. Russell Brain frequently attended Winston Churchill, and there are other examples.

the underlying social unifier at these congresses became modest presumptions of shared class values and a broad, relativist view of neurology's definition.

Moreover, international gatherings offered opportunities as well. They were events celebrating the contributions of the host nation, and were therefore also events emblematic of nationalism.¹⁴ The International Neurological Congress of 1935, for example, coincided with centenary celebrations of John Hughlings Jackson's birth. Jackson, as a figure of international stature, was a national symbol that could be used two ways. He at once exemplified the greatness of the British medical tradition (a tradition that had produced him), while simultaneously he justified and legitimated neurology's status as a distinct medical specialty to practitioners in Britain who still resisted specialization. This allowed both a process of accommodation and rescription of older traditional practices of the British medical establishment into the story of medicine's progress towards rationalisation.¹⁵

What role did the Section of Neurology of the Royal Society of Medicine play in orchestrating these events? As this chapter outlines, it was both an agent for and an obstacle to reform. While providing a venue for scientific meetings, celebratory events, as well as international congresses, the Section lacked control over its members and a copyright of its proceedings. Additionally, the Royal Society of Medicine, like its elite counterpart, the Association of Physicians of Great Britain and Ireland, did not possess the inclination (or wherewithal) to lobby for political changes in the organisation of

¹⁴ Daniela S Barberis, *Changing Practices of Commemoration in Neurology*, especially pp. 102-113.

¹⁵ Cf. Weisz, *Divide and Conquer*, pp. xx-xxx, 40-46, 163-169.

medicine and its specialties. This chapter focuses on this contradiction, and examines specifically how participation by the Section's members in international meetings was instrumental in creating a new, restricted community of British neurologists. If the practices and definitions of neurology remained opaque, the efforts between 1919 and 1933 to reform its organisation began introducing limitations that would eventually clarify its practice.

The Old Idiom

Initially, Henry Head's 1918 Presidential Address, which had challenged the members of the Neurological Section to reconsider the status of their occupation, led initially only to modest changes in the Section of Neurology, even as neurologists were beginning to view themselves differently after the War. Aside from slightly increased efforts to assert broader influence, especially in public and policy discussions of shell shock, few scientific or social developments occurred between 1920 and 1925. Between these five years, the only visible transformation was effected by the introduction of American neurosurgical practices into Britain.¹⁶

Some scholars have suggested that technological changes prompted medical specialization in America and they have offered evidence in the case of neurology.¹⁷ On the other hand, technological changes in medicine proved divisive and formative in

¹⁶ This view is based upon the compilation of the bibliography appearing in Appendix E.

¹⁷ Cf. D J Lanska, "The role of technology in neurologic specialization in America" *Neurology*, Vol. 48, No. 6, (1997), pp. 1722- 1727; George Rosen, *The Specialization of Medicine with Particular Reference to Ophthalmology*, (New York: Froben Press, 1944).

Britain, at least in the case of neurologic practice. While British neurologists mainly regarded technology as having dubious utility compared to the more conventional ‘art’ of clinical examination, the neurosurgeons were more receptive. In a 1924 discussion on American neurosurgeon Walter Dandy’s (1886-1946) new method of ventriculography, Wilfred Harris raised objections on grounds of its potential dangers and limitations, an objection shared by his colleagues.¹⁸ In contrast, albeit acknowledging Harris’s concerns, the neurosurgeon Geoffrey Jefferson (1886-1961) wryly stated that there seemed to be ‘a feeling that to be a supporter of ventriculography was to decry oneself as a neurologist’.¹⁹

These differences of opinion were indicative of an obvious conflict in British medical practice. By this time, neurosurgery was becoming a thoroughly American phenomenon; Geoffrey Jefferson, Hugh Cairns (1896-1952), Norman Dott, and others had trained under Harvey Cushing, and brought back to Britain a technique requiring numerous changes in surgical practice.²⁰ British neurologists, however, viewed Cushing’s practice with suspicion, especially because he rarely relied upon the diagnostic services of the neurologist.²¹ These differences became increasingly framed as a divisive equation between creative idioms: on one side were surgeons, technology and modernity, and on

¹⁸ “Discussion on the Value of X-Rays in the Localization of Cerebral and Spinal Tumours, with Special Reference to Ventriculography” *PRSM*, Vol. 17, (1924), pp. 59-66. It is interesting that James Purves Stewart claimed to be working on his own ‘new’ imaging method, which he admitted was dangerous because ‘heavy oil might flow downwards along the base of the brain as far as the middle fossa, where it might even produce transient cranial nerve palsy’ but he nonetheless maintained such techniques would be eventually of practical value for neurology. *Ibid.*, p. 60.

¹⁹ *Ibid.* 65-66; also see Penelope Hunting, *History of the Royal Society of Medicine*, 266.

²⁰ “Sir Geoffrey Jefferson: A Great Neuro-Surgeon” 30 January 1961, *Times* (London), p. 12; Harold Himsworth, “Sir Geoffrey Jefferson” 1 February 1961, *Times* (London), p. 15.

²¹ G J Fraenkel, *Hugh Cairns*, ch. 7.

the other, physicians, art, and tradition. Small wonder then that these differences fomented a restructuring of neurology, with the formation of the Society of British Neurological Surgeons in 1926, the first splintering of the Neurological Section's broadly defined community.

Nonetheless, these differences over the uses of new technologies notwithstanding, the proceedings of the Section between 1919 and 1925 were relatively normal. Henry Head, suffering from Parkinson's disease, had been forced to give up an important leadership role in the society as his condition worsened.²² Until 1925, the minutes of the Council of the Section chiefly record elections of officers and the arrangements of future meetings only. The atmosphere was not complacent, but little was happening either.²³ The tradition of clinical meetings at the three special hospitals, joint discussions between other sections, and the presentation of scientific work continued its normal course.²⁴ However, circumstances began changing in 1925.

A Meeting of Idioms: The Anglo-American Congress of 1927

In July of 1925, Gordon Holmes received a flattering letter from an American neurologist, Theodore Weisenburg (1876-1934), inviting the Section of Neurology to join the American Neurological Association in an Anglo-American Congress. Weisenburg, a physician to the Philadelphia General Hospital, suggested the meeting occur in America

²² RSMA, K73, Council Minutes, 17 March 1926, p. 220.

²³ See RSMA, K73, Council Minutes, entries between 1919 and 1926; the activity level begins to change around 1925.

²⁴ See Appendix E.

in 1926.²⁵ His request included a formal invitation from the American Neurological Association's President, Bernard Sachs (1858-1944), a neurologist at the Mount Sinai Hospital in New York.²⁶

Although Holmes presented Weisenburg's letter to the Section's Council, they decided that the Section's members should vote on the invitation.²⁷ In October, Holmes finally responded. Admitting that he personally was enthusiastic about the idea, he wrote sadly, 'I am sure that many of the English Neurologists would like to meet you all in America, but I am afraid it would be quite impossible for many of us to get away during May and June as that is really the busiest time of the year, in the middle of the University term and just before the annual Examinations.'²⁸

However, in March of the following year, the Neurological Section offered a similar invitation to the American Neurological Association for a joint meeting in London in 1927.²⁹ The organisation of this proposed conference fell squarely on the shoulders of James Purves Stewart, who by this time was President-elect of the Neurological Section for the years 1927 and 1928 (his disseminated sclerosis research was just beginning to attract attention).³⁰ Purves Stewart, along with Anthony Feiling (1885-1975) and William

²⁵ AABN, Theodore Weisenburg to Gordon Holmes, 17 July 1925; For Weisenburg, see "Theodore Herman Weisenburg" in *Who was Who in America, 1897-1942* (Chicago: Marquis – Who's Who Inc, 1968)

²⁶ "Bernard Sachs" in *Who was Who in America, 1943-1950* (Chicago: Marquis – Who's Who Inc, 1968)

²⁷ RSMA, K73, Council Minutes, [undated entry], p. 218. No explanation of the vote was provided.

²⁸ AABN, Holmes to Weisenburg, 9 October 1925.

²⁹ RSMA, K73, Council Minutes, 9 June 1926, p. 226.

³⁰ Ibid.

Adie – both elected Council Secretaries for those years – wrote to Weisenburg expressing regret that no members of the Neurological Section had attended the America meeting, adding, ‘At our own Annual Meeting, however it was unanimously resolved to send a cordial invitation to the members of the America Neurological Association to attend a meeting in London in July 1927.’³¹ The American association accepted this invitation immediately, and planning for the Anglo-American Congress commenced at the Section of Neurology with the formation of scientific and hospitality committees.

Among the main concerns of the scientific committee were those surrounding the organisation of the papers. The balance between speakers from America and Britain was particularly important to reflect the international profile of the meeting. Moreover, drawing attention to Britain’s neurological eminence was a central agenda – one that had nationalistic implications and was intended to demonstrate British neurology’s supremacy over other domestic clinical traditions.³² Yet, the selection of individuals who had at one time received Rockefeller Fellowships for foreign study – such as neurosurgeons like Hugh Cairns – must have been a politically strategic move.³³

A letter from William Adie reported that the schedule would be short talks on the 25th of July 1927. The second day would begin with a lengthy discussion on the cerebellum in

³¹ AABN, James Purves Stewart, Anthony Feiling, and William Adie to Weisenburg, 22 June 1926.

³² See: List of Americans Registered for work in Neurology at the National Hospital Queen Square, 30 October 1930, 401 A National Hospital for Nervous Diseases, 1930-1933; folder 265, box 20, series 401, 1.1, RAC.

³³ RSMA, K73, Council Minutes, 9 June 1926, p. 226; also see AABN, Programme of British-American Neurological Meeting, July 1927.

the morning, and then a clinical meeting at the National Hospital in the afternoon. The final day would commence with a discussion on sensory disturbances in organic disease, followed by a discussion of pathological papers and specimens in the afternoon – both of these last topics were bound to show Britain at its best.³⁴ The plenary address would be the Hughlings Jackson Lecture, which, in a gesture of diplomacy, the British decided the then President of the American Neurological Association, Charles Dana (1852-1935) should deliver.³⁵

Gordon Holmes, the Chairman of the scientific committee, was by now Editor of *Brain*, Britain's most prestigious neurological journal. He wrote to Weisenburg, 'I am doubly interested in the British-American Neurological Meeting next July, as in the first place I am Chairman of the Committee which has responsibility on this side for the scientific arrangements, and in the second place as Editor of "Brain"'. To Weisenburg, Holmes complained of difficulties in publishing the proceedings. 'The Neurological Association is a Section of the Royal Society of Medicine, which claims a copyright for its Proceedings of all papers and discussions of the Section, so we must get permission to publish these elsewhere...I have intended to suggest that the Proceedings should be published in toto in "Brain"'.³⁶ In this, Holmes eventually succeeded, convincing the Editorial committee of the Royal Society of Medicine to give up their copyright. He reported to Weisenburg, 'The Royal Society of Medicine will not require the Proceedings

³⁴ Benjamin White, *Stanley Cobb: A Builder of the Modern Neurosciences*, (Boston: Francis Countway Library of Medicine, 1984), 100-124.

³⁵ AABN, Adie to Weisenburg, 17 December 1926.

³⁶ AABN, Holmes to Weisenburg, 25 January 1927.

to be published' and, provided the ANA agreed, they would appear in *Brain*. 'I may say that this year we complete our fiftieth volume, and we are anxious to turn out something really good.'³⁷ These uncertainties and this wrangling was one sign of small but nonetheless growing reasons for dissatisfaction with the RSM's political structure.

The President of the Section, James Purves Stewart, in charge of the hospitality sub-committee, was giving his fullest attention to orchestrating a celebration of the British neurological tradition. He wrote, for example, to Edwin Bramwell, soliciting Bramwell's aid in convincing his father, Byrom, to attend the meeting:

I am especially anxious, if it is at all possible, to get Sir Byrom to be with us for one meeting, if he finds himself at all able. We should not ask him to tire himself by a speech of any sort; all we want is to have his presence as an inspiration, so that the members of the joint congress may go back and say to their pupils that they have had the honour of grasping Sir Byrom Bramwell by the hand. I will write myself to Sir Byrom in due course, but meanwhile I hope you will prepare the way. Sir David Ferrier is the other great pioneer whom we are trying to persuade on similar lines, and he has practically promised to come.³⁸

Purves Stewart's effort to arrange for pioneers of British neurology to be present is illustrative of the ways these occasions could subtly rewrite neurology's past. That Byrom Bramwell had made important neurological contributions is obvious, yet his status

³⁷ AABN, Holmes to Weisenburg, 1 February 1927.

³⁸ [Private Collection], Purves Stewart to Bramwell, 26 September 1927.

as an eminent clinician placed him squarely in the older, generalist tradition of medicine. In effect then, Purves Stewart's efforts to secure the presence of a living memory (a pioneer of the field) were creating continuity between conditions of the past and present that oddly denied the conditions of both.³⁹ Nostalgia served in this respect to blur the lines between the two cultures of medicine, affirming the present by establishing a tradition of neurology. A new world was necessitated by the progress of the old.

The Anglo-American meeting was a tremendous success.⁴⁰ The sessions between the 25th and 28th of July 1927 had brought together prominent figures in American and British neurology and psychiatry, including Charles Dana, Harvey Cushing, Wilder Penfield (1891-1976), Adolf Meyer, Gordon Holmes, Samuel Alexander Kinnier Wilson, and Wilfred Harris.⁴¹ The American neurologists had offered a wide-ranging discussion on 'The Cerebellum', which had presented the most up-to-date discussion of the anatomy, physiology, experimental study, surgery, and clinical practice on the cortical structure. The British neurologists, demonstrating the best their clinical-practice/research could produce, led a discussion on 'Sensory Disorders in Organic Disease of the Nervous System.'⁴²

³⁹ For a similar story, see: Daniela Barberis, "Changing Practices of Commemoration in Neurology: Comparing Charcot's 1925 and 1993 Centennials" *Osiris* Vol. 14, (1999), pp. 102-117

⁴⁰ "British and American Neurologists: Meeting in London" *The Lancet*, 30 July 1927, pp.258-259; "British and American Neurologists: Meeting in London" *The Lancet*, 6 August 1927, pp. 301-304. Also see, Enclosure: Archives World Federation of Neurology, Henry A Riley, "Bernard Sachs: The Founder of the International Neurological Congresses" p. 249 in [Yahr to Toole, 13 November 2000].

⁴¹ AABN, Programme of British-American Neurological Meeting, July 1927.

⁴² Ibid.

Afterwards, Adolf Meyer, an American neuropsychiatrist from Henry Phipps Clinic at Johns Hopkins Medical School, was among the crowd of the almost 250 neurologists and psychiatrists – 34 from America – enjoying a splendid repast of twelve courses and accompanying claret at the le Café Royal on the 28th of July.⁴³ The British invited the Americans to the meal as their guests.⁴⁴ *Science* reported later that, ‘Sir James Purves Stewart, president of the section, gave an address on ‘Mount Athos, a Survival of the Middle Ages’.’⁴⁵ Purves Stewart distributed copies of the lecture to the audience ‘with the writer’s compliments’, no doubt at some personal expense.⁴⁶

The events did not cease in London. Following the London congress was a further four-day meeting of the British Medical Association in Edinburgh, which Edwin Bramwell, the President of the Neurological and Psychological Section of the British Medical Association, invited all of those at the London Congress to attend.⁴⁷ At least Bernard Sachs and Adolf Meyer attended, though it is likely many others did as well.⁴⁸ Adolf

⁴³ AMCMA, Banquet Card: British-American Neurological Meeting, 28 July 1927, II/135/2 Meyer; “A Meeting of Neurologists” *The Lancet*, 30 July 1927, p. 243.

⁴⁴ AABN, Programme of British-American Neurological Meeting, July 1927.

⁴⁵ Anonymous. *Science* Vol. 66 (2003), p. 149-150.

⁴⁶ AMCMA James Purves Stewart “Mount Athos: A Survival of the Middle Ages. An Address at a Social Evening of the Royal Society of Medicine, July 15, 1927 (London: John Bale, Sons and Danielsson, Ltd), pp. 83-91 British-American Neurological Meeting, 28 July 1927, II/135/2 Meyer.

⁴⁷ AMCMA, Invitation: Henry Aslop Riley, 31 March 1927, British-American Neurological Meeting, 28 July 1927, II/135/2 Meyer.

⁴⁸ [Private Collection], Edwin Bramwell, *Rough Notes and Recollections 1945: The First International Neurological Congress*, p. 32.

Meyer, for one, was excited at the prospect of returning to Edinburgh, where he had trained as a young man.⁴⁹

For Meyer, the significance of these meetings in London and Edinburgh was emotional as well as professional, and he hardly could have been alone. For many of the figures from America, this must have been a sentimental sojourn in Europe. Many of the American figures in neurology had trained in Europe, and many had returned as medical officers during the Great War. For these physicians, the now deceased William Osler, for example, symbolised the strengths of bonds of Anglo-American fraternity: it was a relationship forged in the tragedies of the age. Indeed a better symbol of this relationship was Osler's son, Paul Revere Osler, who had been killed in France and buried beneath a British flag, an event leading American neurosurgeon Harvey Cushing to reflect on history's many ironies: 'A strange scene – the great-great grandson of Paul Revere under a British flag, and awaiting him a group of some six or eight American Army medical officers – saddened with the thoughts of his father.'⁵⁰ Thus, even if on the surface the motivations behind these first efforts at internationalism were professional, it would be wrong to ignore these psychological undercurrents.

⁴⁹ AMCMA Meyer to Bramwell, 23 April 1927, British-American Neurological Meeting, 28 July 1927, II/135/2 Meyer; also see in the same collection: Bramwell to Meyer, 21 June 1927; and Robertson to Meyer, 11 May 1927.

⁵⁰ Harvey Cushing, *From a Surgeon's Journal*, (Boston: Little, Brown and Company, 1936), p. 198; it is remarkable how often Osler's name appeared in conjunction with affairs like these. See, Bliss, *Harvey Cushing*, p. 468.

What is striking about this conference is how it connected the otherwise disparate and fragmented realities of neurological practice in both countries. Contact between these two nations seemingly allowed neurologists in both contexts to see themselves through the gaze of their colleagues; through this, neurology, epistemologically and institutionally, gained a new social reality, cogency, and visible consistency by incorporating shared perspectives.⁵¹ The result was an ideological consensus, one that derived much of its power from the flexibility of historical discourses – nostalgia, commemoration, and celebration – as well as tropes of progress. As one American neurologist later recalled, ‘all of the Americans who attended the gathering returned to this country enthusiastic over the successes of this meeting and inspired to further such occasions on a larger scale.’⁵² Inspiration was key. The formation of the International Congresses, which subsequently occurred, was an act of profound import, not just for neurology in Britain, but also for the specialty throughout the World. It established an idealised global counterweight to the more distressing local circumstances neurologists often faced in their national contexts.

Framing Plurality: Conventions and Practices of Taste

That the Anglo-American conference and the subsequent International Neurological Congress of 1931 left so many historical sources in such various locations across the globe is itself evidence of the significance of these events for neurologists. For example,

⁵¹ The analysis of the formation of ideology is from Slavoj Žižek, “Melancholy and the Act” *Critical Inquiry* Vol. 26, No. 4 (2000), p. 659.

⁵² Archives World Federation of Neurology, Enclosure: Henry A Riley, “Bernard Sachs: The Founder of the International Neurological Congresses”: 249-255, 249[in Yahr to Toole, 13 November 2000].

primary sources for both are scattered across Britain and America. The Archives of the Association of British Neurologists, the Royal Society, the Royal Society of Medicine, Medical Research Council and the Edwin Bramwell papers contain numerous documents referring to both events. Archives in the United States including collections of such figures as Henry Riley, Harvey Cushing, and Adolf Meyer contain additional sources, while letters in the Rockefeller Foundation Archives contain numerous references to the 1931 Congress. Moreover, a full record of the proceedings of the 1931 Congress exists, and includes a list of all of the attending members and their wives, as well as lengthy abstracts or full transcripts of papers and addresses.⁵³ All of these sources reveal three crucial points. Firstly, the scientific proceedings of this conference were not considered especially significant.⁵⁴ Instead – the second point – the social aspects of the meeting were elevated. Fine dining, ‘smokers’, and sightseeing tours facilitated the building of cordial relationships, and thus compensated for the real, unavoidable differences in professional practices. Finally, the point of emphasising social practices over scientific ones was that these practices denoted and defined common ground upon which neurologists could unify professionally.

⁵³ See the appendix for the nations represented there.

⁵⁴ John Fulton claimed that the congress was important for three reasons. ‘its revelation of the newer trends in neurology, especially the growing pre-eminence of the neurosurgeon; for the international recognition of a new “school” in the ranks of medicine; and for the outstanding personalities among the some 700 delegates from all over the world.’ Later he remarked, ‘More significant than the papers read was the social interchange at the Congress.’ *Harvey Cushing: A Biography* (Springfield: Charles C Thomas, 1946), pp. 606-607.

Planning for the First International Neurological Congress began soon after the British and American Neurological Congress. The American neurologist, Henry Riley recalled how:

...by a fortunate chance, Otto Marburg of Vienna and Bernard Sachs of New York met in Bad Gastein. Their mutual interests led to repeated conversations and developed into a firm friendship...their thoughts frequently turned to the idea foremost in their minds, namely, the development of neurology and psychiatry throughout the world. It was the belief of these two scientists and physicians that Neurology had not yet reached adult stature, nor had it received the recognition in the Universities, particularly of the continent, which it had gained in the eyes of the public due to the emphasis and publicity which had fallen upon it in World War I and the years which had followed that catastrophe. Separate departments for Neurology had been established in many American universities but in numerous localities, Neurology was still looked upon as a branch of Medicine...an International Neurological Congress would serve to focus attention on the coming-of-age of Neurology and that the prestige of the specialty would be greatly enhanced by such a meeting.⁵⁵

Riley's memory that Sachs and Marburg had felt that the public prominence of neurology after the war had not led to institutionally significant developments for the specialty might well have been a complaint shared by members of the British Neurological Section. In any case, when Bernard Sachs sent circulars out to various neurological societies and individuals proposing the First International Neurological Congress in

⁵⁵ Archives World Federation of Neurology, Yahr to Toole, 13 November 2000, [Enclosure: Henry A Riley, "Bernard Sachs: The Founder of the International Neurological Congresses": 249-255, p. 249].

February and March of 1928, the British were immediately enthusiastic supporters.

Edwin Bramwell recounted in 1945:

It was in 1928, so far as I recall, that the various countries of the world were asked if they would co-operate and each country was invited, if it was approved, to form an Executive Committee of six or eight members. The suggestion met with universal approval.⁵⁶

Bramwell was in a good position to remember. His Presidency of the Neurological and Psychological Medicine Section of the British Medical Association had ended just as James Purves Stewart's term as President of the Neurological Section of the Royal Society of Medicine concluded, and the Council elected him to succeed Purves Stewart as President. Bramwell, along with Gordon Holmes and Kinnier Wilson, had received the letter and circular from Sachs proposing the Congress.⁵⁷ The circular claimed 'the Council of the American Neurological Association finds the present time opportune to propose an International Neurological Congress to be held in late Summer of 1931.' If the suggestion were agreeable then the American Committee would immediately form 'a General Committee, the number of days to be devoted to the International Congress, the formation of the Program Committee and any other details that should be considered in order to insure the success of the International meeting.'⁵⁸

⁵⁶ [Private Collection], Edwin Bramwell, *Rough Notes and Recollections 1945, The First International Neurological Congress*, p. 30.

⁵⁷ [Private Collection] Bernard Sachs to Edwin Bramwell, 9 February 1928.

⁵⁸ [Private Collection] American Neurological Association to Edwin Bramwell, 6 February 1928.

Holmes's and Bramwell's responses still exist. Tempted, though hesitant, Holmes admitted he was in favour of a large international neurological meeting, but he did pause to ponder whether an international medical congress might be more appropriate. It was not clear to him what the ramifications of a purely specialist congress would be for British practitioners, but he eventually adopted a common justification: 'I have spoken on this matter to some of my most senior colleagues in London, and the general feeling is that Medicine has now become so large that a Congress devoted to each subject would be more profitable.'⁵⁹ In March 1928, the Secretary of the Neurological Section read the letters aloud to council, emphasising that the proposed International Congress would occur in a formerly 'neutral' country. The Council accepted the proposal immediately.⁶⁰ Bramwell then sent his reply to Sachs. He noted, 'Purves Stewart, Buzzard, Holmes, Wilson and others all enclosed their own cordial approval of the suggestion' and to this he added his own enthusiasm.⁶¹

In early May 1928, the Section of Neurology elected Sir James Purves Stewart and Gordon Holmes delegates to the neurological congress's first planning committee meeting.⁶² By mid-October, they requested additional committee support, and Samuel Alexander Kinnier Wilson, Edwin Bramwell, Charles Symonds, and William Adie joined

⁵⁹ Archives and Special Collections A.C. Long Health Sci. Library Columbia University; Henry Aslop Riley Papers (Hereafter: CASC Riley Papers), Holmes to Sachs, 1 March 1928, folder 12, box 1.

⁶⁰ RSMA, K73, Council Minutes, 8 March 1928, pp. 252 and 256.

⁶¹ CASC Riley Papers, Bramwell to Sachs, 12 March 1928, folder. 12, box 1.

⁶² CASC Riley Papers, Council Minutes, 10 October 1928, p. 262; Adie to Riley, 9 July 1928, folder 12, box 1.

the British committee.⁶³ Holmes, President-elect of the Section for 1929 and 1930, had withdrawn his position as a delegate by 1929 (although he remained on the organizing committee). By this time, the strain on relations between Purves Stewart and the other neurologists were palpable – his disseminated sclerosis experiments had just come to light. A comment in a letter from Purves Stewart to the over-worked Henry Riley captures the bitterness. ‘Incidentally will you kindly note that in the Committee Organization for Great Britain, I am the Chairman and Dr W. Adie is the secretary. List A, as printed, might give the impression that Gordon Holmes is the chairman.’⁶⁴

There were other tensions as well. The British Organising Committee for the Congress (which by now had its own letterhead) was having second thoughts about its relationship with the Neurological Section. The Secretaries of the Section of Neurology reported that ‘doubt had arisen as to the relationship to the Council of the Organization Committee for Berne Congress in 1931. The Council decided that it was a Sub-Committee and should report to the Council from time-to-time.’⁶⁵ Yet, with Gordon Holmes as President of the Section and serving on the Organizing Committee, they made little effort to report officially on the committee’s activities again, until the committee dissolved in December 1931.⁶⁶ Shortly afterwards – July 1932 – and not coincidentally, the council of the Association of British Neurologists would hold its first meeting at Gordon Holmes’ house

⁶³ RSMA, K73, Council Minutes, 10 October 1928, p. 263.

⁶⁴ CASC Riley Papers, Purves Stewart to Riley, 8 January 1929, folder 12, box 1.

⁶⁵ RSMA, K73, Council Minutes, 14 February 1929, p. 266.

⁶⁶ RSMA, K73, Council Minutes, 2 December 1931, p. 304.

– with the exception of Purves Stewart, the members of the new Association were all former members of that organising committee.

In late August 1929, the executive committee of the International Neurological Congress met in Berne to plan the programme. Twenty countries were represented; delegates from as far as Japan, Russia, and the United States, for instance, had come to plan the meeting. James Purves Stewart and Samuel Alexander Kinnier Wilson were there as British delegates. The delegates voted Bernard Sachs President of the Congress, and elected eight Vice-Presidents from other nations, including Britain's Charles Sherrington. They decided to publish the transactions of the Congress in English, German, French, and Italian, and that all four languages would be acceptable for presentations at the Congress. Finally, the committee agreed that the main item on the agenda of the Congress was the question as to whether 'there shall be a definite International Neurological Association with distinct functions of its own or whether there shall be a mere union of Neurological Associations which would arrange subsequent meetings from time to time?'⁶⁷ Numerous members then also suggested that the Congress should hold a session considering neurology's global status.⁶⁸

Attendance at this Congress must have been truly complicated for non-Europeans. When the Congress finally opened in 1931, some of its 890 participants came from places as far

⁶⁷ CASC Riley Papers, Minutes of the Meeting of the Program-Executive Committee of the International Neurological Congress Held at Hotel Bellevue-Palace, Berne, Switzerland August 29th and 30th, 1929; folder 17, box 1, pp. 1-4

⁶⁸ *Ibid.*, p. 4.

away as Japan, Australia, and New Zealand.⁶⁹ No documentation of the expense and difficulty of voyages like those was found, but some suggestive travel documents were available in American archives. For Americans, the cost of attending the Congress was \$5.00.⁷⁰ Travel arrangements were available through Thomas Cook and Sons, who were offering two pre-convention tours of Europe. Taking one of their tours as an example: an American neurologist (and his wife) could have boarded the S. S. Rochambeau on the 30 of July 1931 and arrived in Le Havre on the 8th of August. From there, time was spent in Paris and Versailles, Brussels, Amsterdam, Cologne, Wiesbaden, Frankfurt, Munich, Innsbruck, Zurich, Lucerne, the Alps, Interlaken, and finally ending at the Congress in Berne. The inclusive price was a staggering (this was after all the height of the American Depression) \$760 per person, and many of the American neurologists' wives attended, doubling the cost.⁷¹

A 1930 letter in Adolf Meyer's papers offers particularly interesting features. The first paragraph announced the Congress and explained that membership in it was 'open to all neurologists, psychiatrists, and neuropsychiatrists of the world. It is limited only in the sense that those who wish to become members shall belong to some national or local neurological, psychiatric or neuropsychiatric association or society, and shall secure endorsement of their application by the secretary of such association or by some

⁶⁹ See Appendix D.

⁷⁰ AMCMA, Application Blank for Membership in the International Neurological Congress, 15 February 1930, International Neurological Congress, II/290/1 Meyer.

⁷¹ AMCMA, The Official Pre-Convention Tours, 15 February 1930, International Neurological Congress, II/290/1 Meyer.

neurologists or psychiatrists known to the American Committee.⁷² Thus despite the name of the Congress, it was impossible to limit the membership, because no one was exactly sure where the professional boundaries lay.⁷³

It has been difficult to assess the scientific impact of the Berne Congress. One of the few comments about it came from the neurosurgeon Hugh Cairns, who wrote to Daniel O'Brien, the European representative of the Rockefeller Foundation, that he had attended and thought 'that the outstanding feature of the Congress was the activity of the Cushing group of neuro-surgeons.' Cairns added, 'Professor Sherrington also told me that the other day.'⁷⁴ Cairns' remarks are problematic because they justified his own work at a time when he was applying Rockefeller Foundation pressure to various London hospitals, most of which refused to treat his demands for neurosurgical practice seriously.⁷⁵

In contrast, most accounts of the scientific proceedings are like those by Edwin Bramwell, 'I shall not refer to the business of the Congress, which is fully reported in the Proceedings, but would say something of a few of the eminent neurologists I met at Berne, some of whom I had previously known.'⁷⁶ Bramwell's tendency to focus on the

⁷² AMCMA, Sachs and Riley to 'Doctor', 15 February 1930, International Neurological Congress, II/290/1 Meyer.

⁷³ A copy of the programme appears in: "Occasional Notes", *JNP* Vol. XI, No. 44 (1930), pp. 380-384.

⁷⁴ Cairns to Gregg, 14 December 1931, box 15, series 401A Cairns, Hugh (Neurosurgery), 1.1, RAC.

⁷⁵ However, it seems that Harvey Cushing did present his famous study of 2000 tumour surgeries at this congress. Bliss, *Harvey Cushing*, p. 467.

⁷⁶ [Private Collection] Edwin Bramwell, *Rough Notes and Recollections 1945, The First International Neurological Congress*, p. 30.

social aspects of the Congress was typical.⁷⁷ Indeed, why the Congress published its Proceedings is an interesting question to which I have found no answer, though its 'List of Active Members' was functionally useful for verifying neurology's international stature.

What is striking is that everyone agrees the Congress was significant socially.⁷⁸ Koehler recently claimed it was formative generally, though he was uncertain about its impact in Britain.⁷⁹ In 1968, Zülch wrote that professionally, 'the brilliant first international gathering of neurologists in Berne in 1931 led, at the instigation of Otfried Foerster, to an appeal via the League of Nations "to support neurology, as unfortunately insufficient allowance was made in numerous countries for the autonomy of neurology"'.⁸⁰ The American neurophysiologist John Fulton (1899-1960) wrote in 1940:

International gatherings of scientific men often have an importance, which transcends that of the formal reports of the meeting itself; and this was notably true of the Neurological Congress held at Berne in the autumn of 1931. There had previously been other international congresses of physicians, and even of neurologists, but to neurology, and to medicine generally, the meeting at Berne had peculiar vitality and significance. It was the first time after the World War of 1914-1918 that neurologists from Germany, France, and England, as well as other countries of the world, had found it possible to

⁷⁷ Charles Poser, "The World Federation of Neurology: the formative period 1955-1961. Personal Recollections." *Journal of the Neurological Sciences* Vol. 120 (1993), p. 219.

⁷⁸ Fulton, *Harvey Cushing*, p. 607.

⁷⁹ Peter Koehler, "The evolution of British Neurology in comparison with other countries" p. 64.

⁸⁰ K J Zülch, "The place of neurology in medicine and its future" in P J Vinker ed. *Handbook of Neurology* (North Holland Publishing Company, 1968), p. 14.

have a joint meeting, and it proved to be one that was little marred by politics or the old animosities of war.⁸¹

In Fulton's account, dinner parties and 'smokers' obscured past and present differences in politics as well as historical animosities. Reports of research and clinical case studies filled the days, while celebrations in the evenings continued long into the night. Fulton's account rings decidedly true.⁸² A section of the Congress's Proceedings titled 'Receptions and Excursions' reveals that wives organised all of the social events and local excursions. There were high teas, tours of Berne, speeches by mayors, 'the time flew past being occupied with music, dancing and interesting conversation'. There were tours of the First Swiss Exhibition of Hygiene and Sport, official banquets, and unofficial late night parties. Indeed, the author of the section allowed imagination a flight of patriotic fancy that reads almost ironically now:

Of those Members of the Congress who this evening passed down the lake of Thoune on boardship [sic] and were able to admire from the distance the snow-clad mountains glawing [sic] in the rays of the setting sun we trust there were many who felt desirous of returning to this part of the country to enjoy recreation and refreshment after their daily labour and to gather strength for further activity in the pursuit of the great undertaking

⁸¹ John Fulton, "Arnold Klebs and Harvey Cushing at the 1st International Neurological Congress at Berne in 1931", *BHM*, Vol. 8 (1940), pp. 332-354.

⁸² Bliss, *Harvey Cushing*, pp. 466-468.

which had induced them to meet together in Berne: the investigation and treatment of nervous diseases!⁸³

Bramwell recorded in several places his agreement with this picture. Bernard Sachs, he remembered, had invited him and his wife (and forty others) to a spontaneous supper after the end of the proceedings of the first day.⁸⁴ Bramwell even bothered recalling earlier in his diary of 1934 rather gossipy details about the supper; such as the fact that Stanley Cobb's wife had worn a gift of 'a striking Japanese cloak' that night, much to the mirth of several attending Japanese women, who later confessed it was a man's cloak.⁸⁵ Why were these details recalled? There were other moments he might have remembered: such as Sherrington storming out after Pavlov's session on physiology, exclaiming loudly and cantankerously to anyone who would listen: 'He has accumulated an enormous body of significant experimental data, but his attempts at interpreting it are infantile!'⁸⁶ Why did Bramwell not explain further his brief but all-too-telling aside, 'I was sorry for Purves Stewart, who was acting Chairman of the Committee which represented Britain'.⁸⁷

⁸³ Ladies Reception Committee, "Receptions and Excursions" in *Proceedings of the First International Neurological Congress Bern (Switzerland), August 31st to September 4th 1931* (1931), p. 392.

⁸⁴ [Private Collection], Edwin Bramwell, *Rough Notes and Recollections 1945, The First International Neurological Congress*, p. 30.

⁸⁵ [Private Collection], Edwin Bramwell, Diary entry, 7 November 1934, Volume 1, p. 129-130.

⁸⁶ Sherrington quoted in John Fulton "Arnold Klebs and Harvey Cushing at the 1st International Neurological Congress at Berne in 1931", *BHM*, Vol. 8 (1940), pp. 332-354. Cf. Fulton, *Harvey Cushing*, p. 607. For Sherrington and Pavlov's differences, see Smith, *Human Sciences*, pp. 644-649.

⁸⁷ [Private Collection], Edwin Bramwell, Diary entry, 7 November 1934, Volume 1, p. 130.

It was exactly because the event was socially significant in ways that could be easily dismissed now. With the trauma of past war behind them, the conviviality and gaiety produced and reproduced there was a sign of diminished trust yet unification in bourgeois taste.⁸⁸ In appreciations and dispositions marked by consumption, the community became ‘whole’ again; incoherent, disparate, and not autonomous in their national contexts to be sure, but in Berne, on firmly neutral ground, the community united. Otfrid Foerster’s joyous speech at the official banquet, practically hyperbole, culminated in a triumphant if slightly inebriated message:

This congress is, I repeat, an unparalleled success. Despite the almost Babelonian language barrier that prevails here, we nevertheless stand together as a united people; a brotherhood to our Alma Mater Neurology! May this remain forever!⁸⁹

Such jubilation was extreme, but it had professional advantages. On the first day, Bernard Sachs in his Presidential Address had declared, ‘The purpose of this congress is primarily to establish personal contact and to unite the neurologists of the entire world.’⁹⁰ He added shortly later in his speech:

⁸⁸ It would be very interesting to know how the delegates from the USSR treated the whole affair.

⁸⁹ Dieser Congress, ich wiederhole es, ist ein beispielloser Erfolg. Trotz des schier babylonisch Sprachengewirrs, das hier herrscht, stehen wir doch alle hier, als ein einzig Volk von Brüdern, zu unserer Alma Mater Neurologica! Möchte dies immer so bleiben! Foerster quoted in Fulton, “Arnold Klebs and Harvey Cushing at the 1st International Neurological Congress at Berne in 1931”, p. 353.

⁹⁰ Bernard Sachs, “Presidential Address” in *Proceedings of the First International Neurological Congress, Berne (Switzerland), August 31 to September 4, 1931*, (Berne: Stämpfli, 1932), p. 17.

in every hospital nervous diseases should be treated in special wards and by men and women especially trained for such work. We neurologists have suffered from an excess of modesty, or a minimum of assertiveness, while others have cried from the housetops. The proceedings of this congress will, I am certain, give ample evidence of the importance of neurology in medical and surgical science.⁹¹

Taking up this point precisely, Otfried Foerster, on the final day of the Congress, rehabilitated aspects of his toast at the official banquet, and proposed that representatives vote on a declaration which ‘would express the sentiments’ of the world’s neurologists on the development of neurology in the nations.⁹²

Neurology represents an entirely independent specialty in Medicine. Unfortunately, this fact has not been sufficiently recognized in various countries. The First International Neurological Congress hopes that the Universities and Hospital Authorities of the various States will take active steps to further the progress of Neurology.⁹³

That resolution passed unanimously and the First Congress thus concluded triumphantly. The British neurologists, fifty in total, returned home, after formally inviting the attending delegates to the Second International Neurological Congress to be held in

⁹¹ Ibid., p. 18.

⁹² *Proceedings of the First International Neurological Congress, Berne (Switzerland), August 31 to September 4, 1931*, (Berne: Stämpfli, 1932), p. 373-376.

⁹³ Ibid., p. 376.

London as part of the 1935 centenary celebrations of Hughlings Jackson's birthday being already planned by the Section of Neurology.⁹⁴

By January 1932, William Adie reported to the Section's Council that the 1931 British Organization Committee had disbanded. Thereafter, there is little information in the archives of the Royal Society of Medicine about the organisation of the Second International Neurological Congress. 'The council resolved to appoint a committee consisting of Dr Holmes, Dr Kinnier Wilson, Dr Adie, and Dr Symonds to suggest nominations for the British Committee for the International Congress of 1935 and to report to the next meeting of the Council.'⁹⁵ Gordon Holmes became Chairman, Kinnier Wilson and Critchley were Secretaries, and Anthony Feiling, the Treasurer. The last formal communication between the RSM and this sub-committee occurred in October 1932.⁹⁶ Various publications appearing between 1934 and 1935 make clear the process of organising the event continued, but this no longer occurred under the auspices of the Royal Society of Medicine.⁹⁷ The Section of Neurology had ceased to function politically. The question asked in the next section is, why?

⁹⁴ RSMA, K73, 'It was further suggested that an invitation should be issued to Neurologists of other countries to co-operate in an International Neurological Congress to be held in England during 1935 the Centenary of Hughlings Jackson's birth.' Council Minutes, 12 February 1931, p. 290.

⁹⁵ Ibid., 312; In April, Stanley Barnes, Charles Symonds, W Russell Brain, Hugh Cairns, Macdonald Critchley, Gordon Holmes, Leslie Paton, Frederick Nattrass, Thomas Grainger Stewart and Samuel Alexander Kinnier Wilson would be formed to plan the 1935 Congress. All were founding members of the ABN with the possible exception of Hugh Cairns.

⁹⁶ Ibid., 318.

⁹⁷ "Scientific Events: The Second International Neurological Congress", *Science*, Vol. 81, (1935), 191-192; Articles in *The Lancet* detail much of the proceedings generally. See: "International Neurological Congress", *The Lancet*, 12 Jan. 1935, p. 102; idem "The Neurological Congress", 27 July 1935, p. 204;

The Voices of the Past: the Inscriptions of Practice and the Production of the Field

An anonymous, provocative essay titled ‘International Neurological Congress, Berne’ appeared in a 1931 issue of the *Journal of Neurology and Psychopathology*, just before the International Congress convened in Berne. The Congress, the author reasoned, could only be a good thing for the progress of neurology, because:

It is a curious circumstance that appreciation of an individual’s worth cannot infrequently be properly gauged only when he is encountered personally; we all consciously or unconsciously depend for adequate understanding of the merits of scientific attainment to a large extent on what we glean by direct contact with the person concerned.⁹⁸

This was strongly normalising language, and perhaps these comments referred to the figure of Purves Stewart. It is, of course, impossible to know, but certainly there was an idiomatic rule of practice here; a social and political rule about modes of operation. To be sure, published experimental research was important, but the quality and personality of the person publishing research did matter.

Rightly or wrongly, we often pride ourselves on being able to sum up the value of a man’s contributions better after we have seen him and heard him speak. We take to him, or we do not. If we are every now and then reminded that the artist and his work are separate, or separable, that consideration of the one should influence us neither

idem “Pavlov”, 2 August 1935, p. 258; idem, “International Neurological Congress, The First Day’s Proceedings”, 3 August 1935, p. 268-269; idem, “International Neurological Congress”, 10 August 1935, p. 332-336.

⁹⁸ Editorial, “International Neurological Congress, Berne” *JNP*, Vol. XXI, No. 45 (1931), p. 66-67.

favourably not unfavourably in respect of the other, it is nevertheless legitimate to believe that his work is but the expression of what the artist has within him and that the two are not in point of fact dissociable. And the remark applies also to the scientific as well as to the world of artistry – perhaps with greater force. The reliability of the data in a scientific study cannot altogether be dissociated from what is learned of the author himself by means such as have been already outlined.⁹⁹

What was ‘within’ mattered then: thus, artistic or scientific attainments were measured by a competing idiom of practice, one invested with the ‘theodicy of privilege’ and consecrating qualities supposedly shared by all practitioners but really only understood tacitly. If the artist or scientist and his work were separable, the most discerning eye viewed his practice not through what it was, but through who he was. Judge and be judged, meant not judging methods *per se*, but grasping his personality and character. Trust was tacitly understood practice. Moreover, it was hierarchical, ideological categorisation. The Berne Congress was an opportunity to make those classifications; to normalise those practices within an unwritten professional code.

The Congress thus had two agendas. The first was to establish a unifying hierarchy of habits, which served to create internal definitions. The second was to use those new definitions to build a case for professional autonomy. It is noteworthy that following this discussion of character, the author of the editorial began focusing on a professional agenda for British neurology:

⁹⁹ Ibid, 67.

Can we regard the situation in England favourable when its position in the neurological sphere is given a glance? We have no cause for congratulation, be it fully and promptly admitted. The old Neurological Society of Great Britain was in the habit of promoting an occasional provincial conference over one or two days, but for years none of a comparable kind has been held. Although the latter Society [RSM] covers the whole field of medicine in its numerous sections, this has not prevented the development of distinct associations the prime feature of whose healthy growth is the conducting of annual meetings in different parts of the country. Without more than an allusion to the annual yearly congress of the British Medical Association, we may enumerate as somewhat more applicable to the point as those of the *Association of Physicians*, of British Surgeons, of *Neurological Surgeons*, of the *Ophthalmological Society* – and several more might be mentioned.¹⁰⁰

These were hints here of a rebellion against the status quo, an attempt describing realistically neurology's situation in Britain, and a nostalgic appeal to a perceived past. Yet, was the author saying something new as well? On one hand, the appeal to the proceedings of the Society of British Neurological Surgeons seemed a symptom of a complaint. On the other, mention of the Ophthalmological Society was something new. It suggested a past fork in neurology's road, a conscious decision that had made all of the difference. The juxtaposition of the Association of Physicians against the Ophthalmological Society was no simple accident. It was a powerfully contrived rebuke to the ethos of medical generalism. The reference to the meetings of the Association of Physicians was two-fold. On the surface, it was a justification calling for a cure to

¹⁰⁰ Ibid., 67-68.

neurology's ailments. However, beneath that was a more profound derision for the ethos that had created institutions like the Royal Society of Medicine and the Association of Physicians. All of the promise and all the successes of British neurology had simply aided the prestige of these institutions in the 1920s, and what did British neurology have to show for those accomplishments? Neurologists could not even hold a meeting in the provinces; whereas, their colleagues in ophthalmology had been doing exactly that since the 1880s. The author, however, had a solution.

Then why not an Association of British Neurologists? Surely there is room and room to spare for the formation of such a group. The alternative would be for an annual meeting of the Neurological Section of the Royal Society of Medicine to take place outside London, and for several reasons, which it is not necessary to specify, the former suggestion is clearly preferable.¹⁰¹

The Section of Neurology had been and had become inadequate for several reasons. As an institutionalized entity, it offered no protection against the follies of character and no means of disciplinary action against the likes of Purves Stewart.¹⁰² It was also inadequate because it could not arrange a meeting of provincial members, something even the former Neurological Society of the United Kingdom had succeeded in doing. Likewise, it had too many members. Thus, there were at least three important impetuses underlying the formation of an Association of British Neurologists: an international movement, a desire

¹⁰¹ Ibid, 68

¹⁰² Edwin Bramwell mentioned on three separate occasions in different places in his diaries and autobiographical writing that Purves Stewart had been intentionally left off the roster of members of the Association of British Neurologists.

to determine its membership, and a wish to acquire occupational autonomy. A further impetus was that some leaders perceived British neurology appeared stronger from without (i.e. in international perspective) than from within. As the last chapter suggested, patrons like the Medical Research Council, the Halley Stewart Trust, and the Rockefeller Foundation were obviously interested in neurology's success. Such external interests suggested a road towards professional autonomy.

One year later, on the 28th of July 1932, Gordon Holmes held a meeting at his house.¹⁰³ Among those present were: William Adie, Edwin Bramwell, Henry Cohen, James Collier, Donald Core, Anthony Feiling, Ronald Gordon, James Greenfield, George Hall, Wilfred Harris, William Johnson, Frederick Nattrass, Cecil Worster-Drought, and Samuel Alexander Kinnear Wilson. Together these men decided to form the Association of British Neurologists. This new Association's membership was to be limited to 'those actively engaged in any branch of neurology'. The Association would hold meetings once a year, and its proceedings would not be published in the medical press. Officers were elected: the President was Wilfred Harris, the Treasurer was Samuel Kinnier Wilson, and Gordon Holmes was Secretary. During the months between July and December of 1932, Holmes and others sent out invitations to join the new Association. By the second meeting of the council in December of 1932, Holmes reported that fifty-one neurologists had agreed to join.¹⁰⁴

¹⁰³ AABN Minute Book, Association of British Neurologists. (Hereafter: AABN Minutes) Volume 1, p. 2.

¹⁰⁴ AABN, Minutes Volume 1, p. 3.

Still there was something worrying: only one slightly later letter replying to an invitation to join the Association has been found, and it was sent in 1934. The Aberdeen physician Ashley Mackintosh had responded to an invitation from Edwin Bramwell to join the new Association. He wrote, ‘Although my claim to be a “neurologist” is now very meagre and I am getting more and more lazy as regards attending Meetings, I shall be delighted to join the Association of British Neurologists.’¹⁰⁵ The letter reveals the enduring ambiguity of the neurologist in Britain. A claim to be a neurologist still required inverted commas for some of the physicians invited to join the new Association. It would take another generation before that situation fully reversed.

Conclusion

This chapter has explored the decline of the Section of Neurology, the rise of the Neurological Congresses, and finally the formation of the Association of British Neurologists in 1933. The focus in this Chapter has been on the social aspects of neurology’s practices. Whilst the Section of Neurology of the Royal Society of Medicine provided a venue for neurologists, its policy of open membership created two problems. Firstly, it prevented the community from excluding individuals. It was therefore an institution validating claims of its members to specialized knowledge in neurology, although in practice and particular instances, active members of the section (i.e. members involved in the internal politics of the Section) would have preferred not conferring such status. James Purves Stewart was a singular example. More generally, however, this exclusivity can be seen through comparison: the Section of Neurology’s membership in

¹⁰⁵ [Private Collection], Mackintosh to Bramwell, 12 May 1934.

1937 was 316 strong and, in contrast, the Association British Neurologists had fewer than 70 in the same year. Clearly, the Association of British Neurologists had adopted a narrower definition for the neurologist.

CHAPTER 7

Action and Practice: the Association of British Neurologists, 1933-1965

‘red tape’¹

Introduction

From the 1930s through the 1960s, neurology moved from the margins of clinical practice and knowledge to an internationally and nationally recognized medical specialty. The founding of the Association of British Neurologists (ABN) in 1933 was one important sign of this transformation. Along with increasing representation in hospitals, medical schools, universities and augmented funding for neurological research, there was a gathering domestic movement in neurology for internal self-governance. Beyond these factors, British neurology’s tradition claimed several significant figures from the near past, and this neurological legacy was used to advance the specialty. Neurology was further buoyed by the contributions of British neurophysiology, which was by then world-renowned for research excellence. Its international reputation, signified by the 1932 Nobel Prize awarded to Edgar Adrian and Charles Sherrington, added further healthy hues – neurologists claiming a role in those achievements.

Another alliance existed. British neurosurgeons had formed a Society for British Neurosurgeons (SBNS) in 1926, and by doing so had aided neurology by setting a precedent for exclusive specialization. This action had chafed the sensibilities of the neurological elite; by seeking specialist autonomy, the American-trained neurosurgeons

¹ A derogatory idiom, it describes actions that pay too strict attention to the following of annoying and perceived to be unnecessary rules and regulations. It derives from the red tape – actually pink – used by government offices to bind paper together.

were positioning themselves for what seemed then unorthodox and unrealistic demands. They desired better operating theatres, more beds, larger nursing staffs, and required what to British neurologists seemed ridiculous amounts of time for surgery. They also argued for the right to diagnose and treat patients without the formal examination by a physician with neurological skills. This Cushing school of neurosurgery was viewed with suspicion, but these hostilities encouraged changes in neurology by dividing previously non-existent zones into new competitive markets.²

The 1932 Council meeting of the Association of British Neurologists was one result of this milieu.³ This chapter focuses on the history and context of the Association of British Neurologists. While the Association represented an important step towards autonomy, other contextual factors (sometimes appearing and sometimes invisible in the Association's records) were equally important and must also be considered. These included the Rockefeller Foundation support of neurology, a new relationship between neurologists and the Ministry of Health and the Medical Research Council, the formation at the Royal College of Physicians of a Committee on Neurology, and growing regional recognition of neurology by the National Health Service. The final emergence of British neurology was thus a many-sided effort of various individuals and institutions responding to numerous pressures.

² See, for example, the discussion in O'Brien to Gregg, 17 October 1936, folder 267, box 20, series 401, 1.1., RAC.; G. F. Fraenkel, *Hugh Cairns*, ch. 7.

³ Penelope Hunting, *The History of the Royal Society of Medicine*, p. 267

Sources on the Association of British Neurologists

Was there anything about the Association of British Neurologists that was different from its predecessors? Exclusivity was one departure from the past, and another was self-governance. These are points difficult to demonstrate. It is troubling that few records of the Association exist for the 1930s and 1940s – not even a membership list has been located. All the sources that have been found are Minutes from its Council Meetings. If exclusivity and self-governance were so important (and it is argued they were), then why was so little effort made to protect the sources pertaining to its origins? Why is a list of its Original Members so difficult to locate? Why are accounts from founders about its origins impossible to find? There are at least two plausible explanations, and these need to be considered before its internal history can be explored.

Firstly, it was not clear what relationship the Association would have with the Neurological Section of the Royal Society of Medicine. Clearly the creation of a new professional society of neurologists suggested there were concerns about the Royal Society of Medicine. However there is little evidence supporting the claim made by Macdonald Critchley that the Section of Neurology was losing popularity as either a social or scientific venue.⁴ The Hughlings Jackson Centenary Celebration was held in the rooms of the Royal Society of Medicine in 1935, while events in the 1935 International Neurological Congress in London were hosted there as well.⁵ The frequency of scientific reports there did waver, and the majority of the communications became clinical discussions rather than reports of new research. Thus, if the Neurological Section was

⁴ AABN, Macdonald Critchley, undated address [c. 1985].

⁵ “Hughlings Jackson Centenary: A Commemorative Dinner” *BMJ*, 13 April 1935, p. 769-770.

losing popularity with those neurologists founding the ABN, its meetings remained well attended by its other members.

It may have been felt that the precedent of keeping sources for the Neurological Section was wasteful of energy and resources (all those forming the ABN were former or current administrators of the Section). Since they did not plan on publishing the proceedings, the need for accurate documentation may have been felt lessened. More likely, however, is that archival materials were judged inconsequential by the Association's early Secretaries and thrown away (possibly also for pressure of filing space). In the initial years, the Secretary would have kept the archives at his house. When the Association was founded 'a list of 51 names was prepared to whom invitations to become Original Members of the Association should be sent.'⁶ Gordon Holmes reported to the Council in December 1932 that, 'all to whom invitations had been sent had consented to become members,' probably indicating that he had received a stack of correspondence, now lost.⁷

The first list of fifty-one members was probably printed in an ABN membership book similar to those extant from the 1970s. It is likely the Secretary updated that book every year, and re-issued revised editions to members. A copy from 1974, for example, has the Secretary's (Peter Robinson) pencilled revisions in the margins and texts: Anthony Feiling, an honorary member, had the word 'Dec'd' annotated next to a scratched out

⁶ AABN, Minutes ABN. Vol. 1, p. 2.

⁷ AABN, Minutes ABN. Vol. 1, p. 3.

mailing address, and the addresses of other members were changed.⁸ This practice may be as old as the Association. Perhaps each annotated copy, once reprinted, was thought unremarkable and thrown away. The updated information was what mattered.

This speculative reasoning underscores problems encountered when trying to assess twentieth-century professional organizations. One way of dealing with these problems was initially thought to be oral history, and in the process of writing this dissertation, fifteen interviews were conducted. All those interviewed matter-of-factly related the account provided in Peter Robinson's short history of the Association. Robinson, in turn, acknowledged recollections from Denis Brinton (1902-1986), Macdonald Critchley, Denis Williams (1908-1990), and James Purdon Martin. The veracity of all of these accounts is impossible to judge because of the paucity of original documentary sources.⁹

⁸ AABN, Association of British Neurologists: List of Members, 1974, 1-21, p. 3; It is interesting to note that none of the extant membership or rule books have printer information in them. How these were even produced is not something I have been able to ascertain.

⁹ It is considered a basic principle that oral history requires comparison with other accompanying sources. Since the Association has so few records, recollections or eyewitness accounts sadly amount to anecdote. This comment should not be misunderstood. The way in which these stories are told can prove informative about the way in which the lore of disciplines is constructed and passed-on to the next generation. However, a basic point should be made: Critchley wrote extensive recollections about British neurology. The fact that he never wrote a history of the Association or any recollections of it is noteworthy. I suspect the sub-text here is that he actually knew very little about why the Association was founded. The same may be added for Brinton, Williams, and Purdon Martin; had they said much of note, Robinson would probably have quoted them extensively in his account.

The Association of British Neurologists: an internal account

Like the Neurological Section of the Royal Society of Medicine, the Association of British Neurologists' original membership was occupationally eclectic. For example, the Edinburgh Professor of Psychiatry, David Kennedy Henderson (1884-1965), was a member who often failed to attend.¹⁰ Though there was by then the occasional fulltime neurologist in Britain, the Association was mainly comprised of physicians with wider interests than just neurology, as well as clinical pathologists and neurophysiologists. The Association was, however, felt to be more homogenous than any British neurological society had ever been. Critchley recollected that at the time it was thought appropriate for 'the founding of a select neurological club...restricted to full-blown consultants....'¹¹ Peter Robinson argued that it was founded by 'a group of neurologists' who 'wished to have their own forum to discuss clinical and research problems' distinct from more general discussions held at the Section of Neurology.¹² With only fifty-one members, the Association was certainly exclusive – for contrast, in 1937 the Section of Neurology had 316 members. Nevertheless, many of its early Presidents and council members (such as Edward Buzzard, Edwin Bramwell, Donald Core, Henry Cohen (1900-1977), and Stanley Barnes) had been Professors of Medicine in their regional medical schools and would not necessarily have thought of themselves as exclusively neurologists. Nor was membership so absolutely restricted to those in clinical practice. An entry in an undated Rule Book

¹⁰ AABN, Minutes ABN. Vol. 1, p. 28 'Attention was drawn to the failure of two members, D. K. Henderson and H. M. Traquiar to attend the last two meetings.'

¹¹ AABN, Macdonald Critchley, undated address [c. 1985]. Most fulltime consultants still saw a range of patients in their private practices.

¹² Peter Robinson, "The History of the Association at the 50th Anniversary Meeting, 4th November 1983," (Winchester: Peter Robinson, 1985), p. 5.

makes the point that ‘The object of the Association is to promote the advancement of the neurological sciences in the British Isles.’¹³ The Association’s Minute Book, equally terse, remained ambivalent about whether only clinicians would be admitted:

On July 28th 1932 a meeting was held at 9 Wimpole Street, London [Gordon Holmes’ residence], at which it was decided to form an Association of British Neurologists, the membership of which should be limited to those actively engaged in any branch of Neurology.¹⁴

Membership indicated growing consensus that a specialty of neurology existed and deserved independent status, but what that entailed was not self-evident and the careful appeal to branches of neurology left the matter open-ended.

Founding the Association was undoubtedly a ‘movement towards neurological autonomy,’ but publicly agitating for reforms for neurology seemed vulgar to its members.¹⁵ The *British Medical Journal*, *The Lancet*, *Brain*, and the *Journal of Neurology and Psychopathology* kept the new society’s existence quiet, and the Council decided to refrain from publishing its general proceedings.¹⁶ The planning committee of the Second International Neurological Congress, which was to be held in London in 1935

¹³ AABN, Association of British Neurologists: Rules, p. 1. Undated. The rules changed very little between 1933 and 1960. When they did change, this was noted in the Minutes, and thus the date of this source is not required.

¹⁴ AABN, Minutes ABN. Vol. 1, p. 3.

¹⁵ Christopher Goetz, Teresa Chmura, and Douglas Lanska “Part 1. The History of 19th Century Neurology and the American Neurological Association” *Annals of Neurology* Vol. 53, suppl 4, (2003), p. s20.

¹⁶ AABN, Minutes ABN. Vol. 1, p. 3.

and being arranged by many of the Association's council, was equally silent about the new organization. Indeed the tenor of Association in early years was one of subdued exclusivity. Non-members presented papers but could only attend that part of the meeting. They were asked to leave at the first break.¹⁷

Many living neurologists, when asked, will recall the terror they experienced in presenting their first paper to the Association; the paper's quality of delivery was generally held to be decisive for election.¹⁸ Communications were 'presented informally,' and the audience was solemn and sometimes pernickety.¹⁹ When John David Spillane (1909-1985) was elected President of the Association in 1974, it was recalled that his first paper had been greeted by Francis Walshe's barbed comment 'clearly *someone* [other than Spillane] will have to look into all this'.²⁰ When the Association hosted the Society of British Neurosurgeons in 1959, Charles Symonds remarked dryly at the formal dinner, 'there was some difficulty in finding a time when they [neurologists] were all on speaking terms with one another.' He thought the Association's existence and continued success rather amazing given its members' tendency to jealousy and envy.²¹

¹⁷ Peter Robinson, "The History of the Association at the 50th Anniversary Meeting, 4th November 1983," (Winchester: Peter Robinson, 1985)

¹⁸ As it happens, I have no evidence suggesting that once presenters were up for membership they were not voted to member status after delivering their paper. No one has left an account of being rejected for membership because of their paper. Perhaps the fears were exaggerated. Peter Robinson, "The History of the Association at the 50th Anniversary Meeting, 4th November 1983," p. 7; John Walton, *The Spice of Life: From Northumbria to World Neurology* (London and New York: Royal Society of Medicine, 1993), p. 341.

¹⁹ They were spoken, not read. AABN, Association of British Neurologists: Rules, p. 5.

²⁰ John David Spillane, *Munk's Roll*, 1985

²¹ WL, PP/CPS/3, ABN Dinner.

There was one meeting held per year throughout the 1930s and 1940s. In 1950 a second meeting was added to the program.²² The Annual Meetings of the 1930s were uneventful, perhaps only remarkable for how little occurred at them. Meetings were mainly for scientific communications, and rare was anything resembling a broader political agenda.²³ Usually the President-elect would have invited the Association to meet in his home city. Edwin Bramwell, for instance, was to preside over the fourth Annual Meeting, and had invited the Association to meet in Edinburgh at the third meeting in 1935.²⁴ Typically, the Council would meet in London early in the year and plan an administrative agenda for the coming Annual Meeting's arrangements. In January of 1936, Bramwell and the Council met at 9 Wimpole Street [Gordon Holmes' house] to plan the coming meeting. By then Bramwell had arranged for the general meeting to be held at the Edinburgh Royal Medical Society and the reception and dinner at the Royal College of Physicians, Edinburgh. 'It was decided to hold [the meeting] in the same weekend as when the Physiological Society meets...if possible'.²⁵ Commonly a second meeting of the Council was held later in the spring where new members were nominated and last details finalized.²⁶ The Fourth Annual Meeting occurred in June 1936, exactly as planned. After a new member – Samuel Nevin (1905-1979) – was elected, the scientific proceedings began and were only occasionally interrupted by breaks for tea. Thirteen papers were presented and although mainly clinical, were representative of a broad array

²² AABN, Minutes ABN. Vol. 1, pp. 100-101. Walton, *The Spice of Life*, p. 341.

²³ Peter Robinson, "The History of the Association at the 50th Anniversary Meeting, 4th November 1983 (Winchester: Peter Robinson, 1985), p. 7.

²⁴ AABN, Minutes ABN. Vol. 1 p. 23.

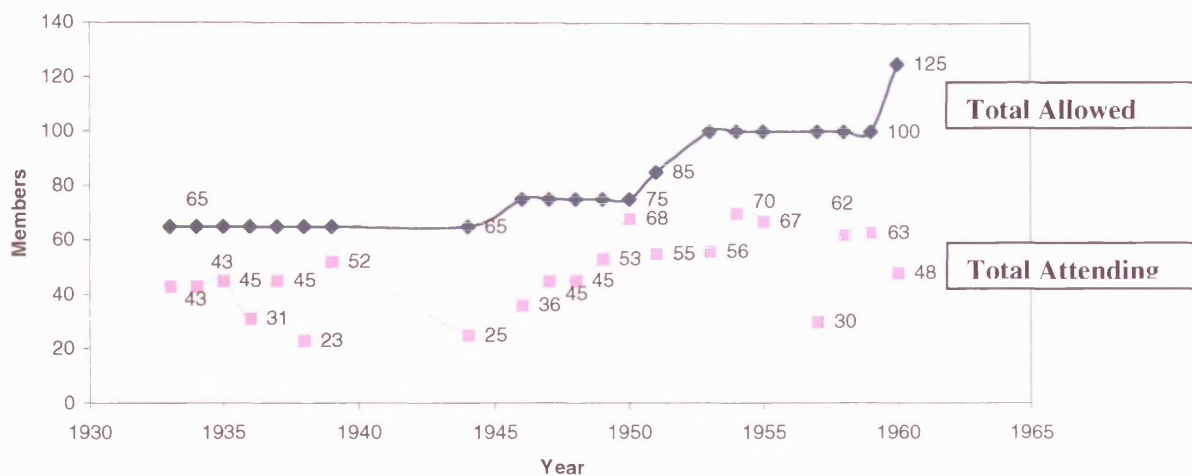
²⁵ AABN, Minutes ABN. Vol. 1, p. 27

²⁶ AABN, Minutes ABN. Vol. 1, p. 28-29.

of neurological disciplines. Edgar Adrian, for example, presented 'Cortical Activity due to Electrical Stimulation.'²⁷

Chart 7.1

Total Members Allowed in ABN versus Attendance of Members at First Yearly Meeting



In many ways the meetings were like those of today, except that attendance was far lower. Only thirty-one members attended the Fourth Annual Meeting. (Attendance would not be much larger until the 1970s.)²⁸ In general, the Association alternated its meetings between London and the Provinces. In the former, the meetings were held at various institutions, while extra-metropolitan meetings tended to be in cities with universities. In 1937 the Association held its first joint meeting with a neurological society from abroad, which set a precedent for many similar joint meetings that followed.²⁹ That same year the Association began recognizing Overseas Members, although these could only be former

²⁷ AABN, Minutes ABN. Vol. 1, p. 31-32, Adrian on p. 31.

²⁸ AABN, see Minutes ABN. Vol. 2, p. 2.

²⁹ It was the Neurological Society of Amsterdam. AABN, Minutes ABN. Vol. 1, 38-40.

members taking up ‘appointments abroad’.³⁰ Because of the war, 1939 was the last year the Association convened until 1945. An administrative meeting was held in 1944, and the pattern of Annual General Meetings resumed in 1945.³¹ In 1950, the Association began meeting twice yearly.³² Thereafter, business continued as usual and followed the pattern established in the 1930s. Only two noteworthy changes occurred from the pre-War circumstance. One was that attendance (as well as the number of members permitted to join) began increasing slightly. The second was that the Council of the Association began lobbying the Royal College of Physicians to aid neurology.³³

As already noted, beyond the Association’s Minutes, few records of its proceedings and administration have been located. The Minutes, though splendidly detailed, are not particularly illuminating as to the experiences of those attending meetings in the 1930s. Nor have many records pertaining to the Association been located in the papers of British neurologists. Bramwell’s diary, so far as I know, provides the only extant description and is therefore worth recounting.

Bramwell wrote that he had taken a night train from Edinburgh and arrived at Euston in the early morning. He was staying at Gordon Holmes’ house that night, and (according to the diary) they breakfasted together at 9 Wimpole Street, before the meeting. At the

³⁰ AABN, Minutes ABN. Vol. 1, p. 40; this was probably done so that Derek Denny Brown could continue holding his membership despite an appointment in the United States. Edward G. Robinson had returned to Australia. He was the first overseas member to be admitted. He also played an important role in founding the Australian Association of Neurology.

³¹ AABN, Minutes ABN. Vol. 1, pp. 55, 64-66.

³² AABN, Minutes ABN. Vol. 1, p. 103.

³³ AABN, Minutes ABN. Vol. 1, p. 55-56.

meeting, which was at the National Hospital, Edward Buzzard 'vacated the Chair' for Stanley Barnes, then Dean of the Medical Faculty in Birmingham. Bramwell then briefly recorded:

A very successful meeting: There must have been fifty present. Last year at Leeds there were only twenty-three. It has been suggested that the Association meets every second year in London. After the Meeting, Greenfield showed us round the new Rockefeller extension and laboratories. In the evening the Association dined at the Langham – an excellent dinner, twelve and sixpence exclusive of wines. We sit where we choose at these dinners; I sat between Farquhar Buzzard and Symonds. The dinner was very enjoyable.³⁴

He noted the following day 'Yesterday's meeting was continued at 9.30 at the National Hospital. There were six communications again today. The most interesting, I think, were Adrian on Electrical Stimulation, Graham Brown on Reflex Gait in Decerebrate Cats, and Riddoch on Phantom Limbs. I left Kings Cross at 1.20 arriving home at 8.45.'³⁵

Bramwell's succinct account draws attention to certain details of the Association that might otherwise be ignored. Because it was a society for neurologists across Britain, travel to the meetings became one of the investments of membership. Members came from as far as Edinburgh and Dublin to attend its meetings. For whatever reason, Bramwell felt the need to mention the details of the journey; theirs was a world made

³⁴ [Private Collection], Edwin Bramwell, Diary entry, 5 May 1939, Vol. 6, pp. 99-100.

³⁵ Ibid., p. 100.

smaller by rail, but not necessarily as small as might be imagined. He mentioned both the dinner and scientific proceedings, which also suggested the enduring multidisciplinary quality of the neurological sciences.³⁶ Neurology remained broad and integrative in focus, although one observation that can be made from the Association's Minutes was a steady upward trend in the clinical research reports.³⁷ Bramwell's mention of a tour of the new Rockefeller Wards at the National Hospital, which were finally operational, is also interesting. (Why it is interesting is considered fully in the next section.)

These patterns defined the Association of British Neurologist in the interwar period. Besides an increase in the number of meetings per year and the mounting of a lobbying campaign for British neurological services, these trends continued well into the 1960s. For all purposes, except for an expansion in members and growing political autonomy, the Association of British Neurologists has changed little from its past configurations.

Proving Action: Neurological Research at the Association of British Neurologists

Still unanswered fully is the question of what was different about Association of British Neurologists from its predecessors. There are a few clues in the archives of the Medical Research Council and the Rockefeller Foundation guiding us towards a new hypothesis, which may also contextually suggest reasons for the way neurology came to be perceived as an autonomous specialty in Britain. Only a little information can be directly obtained from the sources themselves, but much can still be inferred.

³⁶ AABN, Minutes ABN. Vol. 1, p. 53.

³⁷ Nor were these the descriptive discussions of interesting cases, which dominated the proceedings of the Section of Neurology from 1933 until 1952.

If the formation of the Association of British Neurologists was scientifically important, then it was equally significant socially. Communications at its General Meetings could be used to demonstrate that progress in neurological science was being made within laboratories now receiving support from, for example, the Medical Research Council or the Halley Stewart Trust. The recently endowed MRC Neurological Research Unit came into being at almost the same time as the Association of British Neurologists. This was probably coincidental, but the new Unit being directed by Edward Carmichael certainly directly benefited from this new venue. By providing neurological researchers with an independent forum for presenting the results of research, it was possible to show that research was ongoing, even if it was not ready for publication. Practice required signs of action, and one proof of action was in the delivery of a well-rehearsed paper.

Explicit signs of work were instrumental in promoting the achievements of young Halley-Stewart scholars.³⁸ Though the Halley-Stewart Trustees may have been unable to assess the quality of the research, they could infer from communications and publications that their support was being put to good use. Edward Carmichael, for example, in a letter to the MRC, cited such presentations to justify his request that the young Registrar turned neurological researcher, Samuel Nevin, be reappointed to the Halley-Stewart Fellowship. 'An outline of what has been obtained was given at a recent meeting of the Association of British Neurologists and is now being prepared for the press. There is no doubt that he is working hard and doing good work.'³⁹ Outlining research before a group of one's peers

³⁸ See Appendix C, Chart C10A. A later example of such a use appears in: *Institute of Neurology Annual Report 1952-53*, University of London British Postgraduate Medical Federation, p. 16-18.

³⁹ NA, FD1/2415 Neurological Unit, Queen Square, Carmichael to Thompson, 8 July 1935.

was no small task, and the Association's exclusive meetings, being daunting affairs, suggested a researcher's respectability and future fecundity. If the audience received Nevin's work positively, then there could be no question of his deserving the reappointment he eventually received.⁴⁰

Communications were equally important for Edward Carmichael's career. His Directorship of his Unit was tenable for five years. The National Hospital or the Medical Research Council could then appoint a new Director if they desired. It became evident shortly after Carmichael's appointment that some of his colleagues felt his younger independent collaborator, Derek Denny Brown (1901-1981), was more talented and deserving of that position.⁴¹ But Carmichael had many supporters, and a Director of any Research Unit who could boast: 'Just off to Oxford for the annual meeting of the British Neurologists. Four papers from the unit to be given' need not have worried too much about the future.⁴²

Judged statistically by reports given at the Association's meetings, Carmichael and his group were the most active British neurological researchers in the 1930s and 1940s. Of the one hundred thirty-six communications presented to the Association of British Neurologists, twenty-three, or 16.9% of the total, came from Carmichael's Unit.⁴³ This is

⁴⁰ NA, FD1/2415 Neurological Unit, Queen Square, Green to Carmichael, 26 July 1935.

⁴¹ NA, FD1/2415 Neurological Unit, Queen Square; also see, for example, Alan Gregg to William Lennox, 13 May 1935; O'Brien to Gregg, 3 September 1935; Gregg to O'Brien, 18 September 1935; Daniel O'Brien to J G Greenfield, 18 June 1936, folder 267, box 20, series 401, 1.1, RAC.

⁴² NA, FD1/2415 Neurological Unit, Queen Square, Carmichael to Green, 6 July 1934.

⁴³ AABN Minutes ABN. Vol. 1, analysis of meetings on p. 2-91.

a staggering percentage when it is considered that of the fifty-three individuals presenting research at the ABN in the first ten years, only five worked in Carmichael's unit.⁴⁴ In addition, James Godwin Greenfield presented nine papers in that period, and although Greenfield's official position was as the National Hospital's Pathologist, he worked and assisted Carmichael's group in ways that further increased the Neurological Research Unit's presence at these meetings.

Both the total work of the Unit and Carmichael's achievements received accolades. From the beginning of his appointment, Carmichael had impressed the Rockefeller Foundation officers. 'He strikes me as a very high type and exactly the man for the place.'⁴⁵ Such observations continued. When William Lennox (1884-1960), an American expert on epilepsy, was in Britain in 1935,⁴⁶ he observed in a letter to the Rockefeller Foundation, that Carmichael's leadership had improved research at Queen Square. Lennox observed tensions between the laboratory workers and the clinicians derived from Carmichael's successes in both arenas. 'Underneath the polite exterior, I sense a strong current of jealousy of the position and future of bedside neurology. The influential men of the staff have gained their reputation and knowledge by the use of pin, cotton wool, and reflex hammer and are a bit scornful (and fearful) of the new paraphernalia of the laboratory.'⁴⁷ Lennox was unequivocal to the Foundation about Carmichael's performance. 'At the Association of Neurologists meeting at Bath, which I attended, there was none like

⁴⁴ In other words, 9% of the participants were producing 16% of the total work.

⁴⁵ O'Brien's Diary, 9 December 1933, folder 265, box 20, series 401, 1.1, RAC.

⁴⁶ On Lennox, see Benjamin White, *Stanley Cobb: A Builder of the Modern Neurosciences*, 90

⁴⁷ William Lennox to Alan Gregg, 2 June 1935, folder 267, box 20, series 401, 1.1, RAC.

him.⁴⁸ For Carmichael and his colleagues in the Research Unit, the Association of British Neurologists offered multiple advantages: the most important of these was demonstrating productivity through the dissemination of information.⁴⁹

If extant sources suggest much about the role of the ABN in promoting the emergence of the specialty, there were also small implicit signs that the society provided new respectability for neurology.⁵⁰ During the 1930s observers from the Rockefeller Foundation attended meetings of the Association of British Neurologists. They reported their impressions of these meetings to Foundation officers in the United States, and they regularly used the meetings as excuses for interviewing individuals about the condition of British neurology.⁵¹ From their perspective, British neurology's international prominence had grown substantially in the interwar period, especially in the years following the

⁴⁸ Ibid.

⁴⁹ Carmichael was often careful to note in his Official Annual Report's to the Medical Research Council the number of communications made to scientific societies. Most of these communications were to the ABN. It is interesting to note that reports from other MRC-supported units tended to list publications only. Carmichael, in contrast, often included both sets of information.

⁵⁰ O'Brien to Gregg, 29 December 1935, folder 267, box 20, series 401, 1.1, RAC, specifically, page 3; See the discussion of communities of neurologists in: O'Brien's Diary, 30 September 1936 – 2 October 1936, folder 267, box 20, series 401, 1.1, RAC; Similar tricks were attempted in the National Hospital's grant application to the foundation. Appendix 6 was a breakdown of 'investigations which are being undertaken at present.' The agenda was to show work was being carried out in the absence of support. *An Appeal to The Rockefeller Foundation by The National Hospital for Diseases of the Nervous System Queen Square for Aid in Research and Teaching in Neurology*, pp. 1-53, see pp. 52-53, folder 273, box 20, series 401, 1.1, RAC.

⁵¹ For example, William Lennox to Alan Gregg, 2 June 1935, folder 267, box 20, series 401, 1.1, RAC; Carmichael to O'Brien, 14 June 1937, folder 267, box 20, series 401, 1.1, RAC.

Anglo-American Congress of 1927.⁵² Johns Hopkins Medical School, for example, had attempted to recruit British elite neurologists to spearhead the development of a Department of Neurology.⁵³ It was no secret that Francis Walshe and Gordon Holmes had been offered the job of creating a new Department at the prestigious institute.⁵⁴ Both turned it down.⁵⁵ The Rockefeller Foundation had been watching events at Hopkins closely, perhaps waiting to see if a British neurologist might be tempted to America. When Holmes visited they were particularly interested to learn how many American postgraduates had studied at the National Hospital in the 1920s.⁵⁶ It was clear that the bulk of American students studying the subject in Europe were receiving their training at the National Hospital. Sometimes more enthusiastic students were aiding Carmichael's

⁵² For example, 54 American postgraduates had studied at Queen Square from 1920 to 1940. List of Americans, folder 267, box 20, series 401, 1.1, RAC.

⁵³ A similar story is recounted in: Joel A Vilensky, Sid Gilman, and Pandey Sinish, "Denny-Brown, Boston City Hospital, and the History of American Neurology" *Perspectives in Biology and Medicine* Vol. 47, No. 4 (2004), pp. 505-518.

⁵⁴ The Department was not actually created until 1952.

⁵⁵ The correspondence is thick on this point, see: UCL Francis Walshe Papers, Warfield Longcope to Francis Walshe, 24 June 1924; Warfield Longcope to Francis Walshe, 4 September 1924; Francis Walshe to Lewis Weed, 12 December 1924, AMCMA, The Lewis H Weed Collection, Henry Thomas to Francis Walshe, 17 October 1924; Lewis Weed to Francis Walshe, 31 March 1925; Francis Walshe to Lewis Weed, 16 April 1925a, Walshe, F.M.R., 1922-1937, The Lewis H Weed Collection. AMCMA; Lambert to O'Brien, 1 May 1930, folder 265, box 20, series 401, 1.1, RAC; Weed to Lambert, 5 Nov. 1930; Lewis Weed to Robert A Lambert, 12 November 1930, folder 267, box 20, series 401, 1.1, RAC.

⁵⁶ This was information Gordon Holmes provided when he came to America in 1930. Lewis Weed to Robert A Lambert, 12 November 1930, folder 265, box 20, series 401, 1.1, RAC; List of Americans Registered for work in Neurology at the National Hospital Queen Square, 30 October 1930, 401 A National Hospital for Nervous Diseases, 1930-1933, folder 265, box 20, series 401, 1.1, RAC.

research, which was being reported at the Association of British Neurologists' meetings.⁵⁷

It had become evident to the Rockefeller Foundation that neurology required stimulus on an international basis, and they were considering an endowment for neurological research at the National Hospital.⁵⁸ In the same year that the Association was founded, Gordon Holmes and Francis Walshe had begun working on a request for Rockefeller support, and were informed that the foundation would consider their proposal with great sympathy.⁵⁹

Creating the Association of British Neurologists might have been one simple means of demonstrating continuing internal vigour in the neurological community.⁶⁰ This movement towards autonomy from the Royal Society of Medicine would have been viewed as a sign of the specialty's progress and modernity. It indicated that medical

⁵⁷ This proved to be true later. Carmichael to Gregg, 2 October 1936; enclosure Carmichael to Gregg, 2 October 1936, folder 268, box 20, series 401, 1.1, RAC; also see correspondence Lambert to Alan Gregg, 2 February 1937, folder 269, box 20, series 401, 1.1, RAC.

⁵⁸ Pearce to Gregg, 13 February 1929, folder 214, box 15, series 401A, RAC; O'Brien to Gregg, 6 April 1932, folder 265, box 20, series 401, 1.1, RAC; On RF funding generally in this period see: William Schneider, "The Men Who Followed Flexner: Richard Pearce, Alan Gregg, and the Rockefeller Foundation Medical Divisions, 1919-1951" in William Schneider ed. *Rockefeller Philanthropy and Modern Biomedicine: International Initiatives from World War I to the Cold War* (Bloomington: Indiana University Press, 2002), pp. 7-60, for neurology specifically see pp. 43-47.

⁵⁹ O'Brien, Diary excerpt March 12 1932, folder 265, box 20, series 401, 1.1, RAC; *An Appeal to The Rockefeller Foundation by The National Hospital for Diseases of the Nervous System Queen Square for Aid in Research and Teaching in Neurology*, pp. 8, folder 273, box 20, series 401, 1.1, RAC.

⁶⁰ This letter does not mention the Association of British Neurologists. It offers a long discussion of the vitality and potential in British neurology. It was views like those in this letter Holmes and others were seeking to maintain by founding the ABN. O'Brien to Gregg, 4 April 1932, folder 265, box 20, series 401, 1.1, RAC.

specialization was now a matter of fact, at least so far as the British neurologists were concerned.⁶¹

Rockefeller interest in British neurology had dated from the 1920s. They had, for example, been watching and considering supporting Edward Carmichael's career even before he became Director of the MRC Neurological Research Unit.⁶² Although by 1930 there were institutes of neurology in Belgium, Germany, France, and the United States, figures at the Rockefeller Foundation saw British neurologists as particularly talented, hardworking, competent, and charismatic.⁶³ More broadly, the Foundation's interests were compelled by concerns with the real lack of progress in treating asylum patients.⁶⁴ Institutions everywhere were overflowing. A new rhetoric from figures in neurology, neurosurgery, and psychiatry was calling for more research in these fields.⁶⁵ Neuropsychiatry was a panacea that emerged from this rhetoric, and the Foundation

⁶¹ Penelope Hunting, *The History of the Royal Society of Medicine*, p. 267. The Society of British Neurosurgeons was founded in 1926. It is clear this was part of the impetus to form the Association of British Neurologists. G. J. Fraenkel, *Hugh Cairns: First Nuffield Professor of Surgery, University of Oxford* (Oxford: Oxford University Press, 2003), p. 59-74.

⁶² See, for instance, Francis Fraser to Alan Gregg, 6 June 1932, 401 A National Hospital for Nervous Diseases, 1930-1933; folder 265, box 20, series 401, 1.1, RAC

⁶³ On the distribution of neurological institutes see: Ingrid Farreras, Caroline Hannaway, and Victoria Harden ed. *Mind, Brain, Body, and Behavior: Foundations of Neuroscience and Behavioral Research at the National Institutes of Health* (Amsterdam: OUS Press, 2004); Russell DeJong, *A History of American Neurology*, (New York: Raven Press, 1982); Merritt, "Horizons in Neurological Sciences: Neurology".

⁶⁴ Pressman, *Last Resort: Psychosurgery and the Limits of Medicine*, pp. 30-35.

⁶⁵ Bliss, *Harvey Cushing: A Life in Surgery*, p. 496; E.W. Archibald, ed. *Neurological Biographies and Addresses; Foundation Volume; Published for the Staff, to commemorate the Opening of the Montreal Neurological Institute of McGill University*, p. 7-12.

hoped research at the National Hospital might proceed in that direction if it were supported.⁶⁶

The Foundation acknowledged the lack of institutional recognition for British neurology in hospitals, which it attributed to a by-product of British traditionalism.⁶⁷ Yet, they were uneasy about the discipline's absence in academia. The National Hospital was not specifically affiliated with any university. Nor did there seem to be any academic chair for clinical neurological research there or anywhere else in Britain. If the MRC Neurological Unit had represented State recognition of neurology, it still did not automatically translate into the academic standing the Foundation normally desired. The fact that they would not be supporting salaried researchers but rather physicians with large private practices presented a difficulty.

As a rule, the Rockefeller Foundation preferred to develop university research programs. They did not support independent hospitals with good intentions but tenuous operating budgets – the temptation to use research endowments for other purposes in strained economic years was sometimes too great.⁶⁸ However, academic neurology was not a subject commonly recognised in universities anywhere in the world at that point. Moreover, as the Foundation contemplated endowing research at the National Hospital, it

⁶⁶ From the British point of view this was a controversial policy. The Medical Research Council especially disliked it. See Edward Mellanby's comments: NA, FD 1/2820, Personal Note 1581 1A-1B, 9 November 1937.

⁶⁷ Developments at the National Hospital were thus not obstructed by their own local values. It seems by the 1930s, the Foundation was more willing to not interfere with local customs, unlike in Edinburgh in the 1920s. Cf., the Foundation's program in Edinburgh in the 1920s. Chris Lawrence, *Rockefeller Money*.

⁶⁸ Gregg to Frederick Macmillan, 17 April 1935, folder 265, box 20, series 401, 1.1, RAC.

became obvious to them that to penalize an institution for belonging to the disparate system of London Teaching Hospitals was simply to sacrifice talented resources not existing elsewhere.⁶⁹ The organization for medicine and medical research in London was known to be impractical, but they deemed that this was for complex historical reasons that had little bearing on the merits of the National Hospital's faculty.⁷⁰ Was it sensible to deny workers with great potential the resources they required because of inflexible policies?⁷¹ Their conclusion was no, and by 1935 the National Hospital had received a grant for £60,000 for construction of new laboratories and teaching facilities. Another £60,000 was given as a research endowment.⁷²

On more than one occasion, the Rockefeller's representatives had been in London and attended meetings of the Association of British Neurologists.⁷³ Implicitly, so the sources seem to suggest, the Association of British Neurologists affirmed the competency, vitality, and charisma of the neurologists to the Foundation. Explicitly (but rarely) the

⁶⁹ Alan Gregg to Daniel O'Brien, April 29, 1932, folder 265, box 20, series 401, 1.1, RAC

⁷⁰ Indeed, this complaint had been lodged against the National Hospital and the organisation of British Medicine generally by 1918. See J. G. Adami's comments 'On the Problem Graduate Medical Study in London' in *Contributions to Medical and Biological Research*, pp. 10-15.

⁷¹ The problem was one readily identified by younger neurologists. 'He [Derek Denny Brown] feels there is much need for a more closely knit structure in teaching and research. An important factor, he says, for the younger men – and this certainly would be the case for Carmichael – is the need for professorial or other University status. On this point, unfortunately, the older men are not especially interested, but the issue is most vital for the younger people.' O'Brien to Gregg, 17 October 1936, folder 267, box 20, series 401, 1.1, RAC.

⁷² National Hospital for Diseases of the Nervous System – London, 10 April 1935, folder 265, box 20, series 401, 1.1, RAC, RF; Gregg to Macmillan, 7 March 1935, folder 267, box 20, series 401, 1.1, RAC

⁷³ William Lennox to Alan Gregg, 2 June 1935, folder 267, box 20, series 401, 1.1, RAC; Carmichael to O'Brien, 14 June 1937, folder 269, box 20, series 401, 1.1, RAC.

sources suggest the Association was used as means of demonstrating that work and the dissemination of new information was ongoing.⁷⁴ Consequently a new and defining legitimacy, which had never existed in British neurology before, was developed out of this practice.

Practice without Action: Members without Meetings, 1939-1944

Britain declared war on Germany on the 3rd of September 1939. A few days earlier the Third International Neurological Congress had convened in Copenhagen from the 21st to the 25th August.⁷⁵ German, French, American, and British neurologists had presented communications at the Congress. Preparations for war had been in the making in Britain since 1938, and many neurologists had been involved. These followed the typical pattern identified by Alan Young in his economic history of the War. British political decision making tended to be made by small, unrepresentative committees; this had several drawbacks.⁷⁶ These committees tended to have less power than is often recognised; also the committees were capable of identifying problems and proposing corrections. However, they lacked the ability to enact policy changes down the chain of command. In interesting contrast, committees concerned with neurological research and treatment in this period were often successful at implementing national policy.

⁷⁴ Report of the Research carried out in the Laboratories of the National Hospital during the year 1938-9, folder 271, box 20, series 401, 1.1, RAC.

⁷⁵ AMCMA, Third International Neurological Congress, 11/290/2 International Neurological Congress.

⁷⁶ Alan Young, *War, Economy, and Society, 1939-1945* (Penguin Books, 1987), p. 111.

As there were no meetings of the Association of British Neurologists from the 7th of May 1939 until the 29th of January 1944, it is worth considering how members of the Association were occupied during the War.⁷⁷ This need not be exhaustive, for the context of one government committee is representative.⁷⁸ Many of the ABN's members in London and across the Kingdom were in constant contact with each other. They were seeking to coordinate Ministry of Health provisions for soldiers with nerve injuries with a Medical Research Council clinical research study on the treatment of those conditions. As will become clear, the successful coordination of projects combining research and treatment in this way, aided the emergence of neurology under the National Health Service, and indeed it may have partially created precedents for the regionalised plan adopted by the Health Service in 1948.

In Britain, preparations for War throughout 1938 and 1939 had focused on a number of elements. These included evacuation plans for civilians during air raids and more generally arranging medical services for civilian casualties.⁷⁹ A Ministry of Health Committee (which included Gordon Holmes) had also put together a plan for the

⁷⁷ AABN, Minutes ABN. Vol. 1, p. 54.

⁷⁸ There is little work on the Second World War and British Neurology. Relevant sources include: Percival Bailey, "The Present State of American Neurology" pp. 111-117; Wilder Penfield, "Clinical Notes from a Trip to Great Britain" *Archives of Neurology and Psychiatry* Vol. 47 (1942), pp. 1030-1036; Wilder Penfield, "Some Problems of Wartime Neurology" *Archives of Neurology and Psychiatry*, Vol. 47 (1942), pp. 839-840; J. Clifford Richardson, "Clinical Experiences with a R.C.A.M.C. Neuropsychiatric Division in England 1940 to 1944" *PRSM* Vol. 2 (1944), pp. 373-376.

⁷⁹ Edgar Jones, Robin Woolven, Bill Durodie, and Simon Wessely, "Civilian Morale During the Second World War: Responses to Air Raids Re-examined," *SHM*, Vol. 17, No. 3 (2004), pp. 463-479.

organisation of the hospital services in War.⁸⁰ Anticipating the greatest medical crisis Britain had ever faced, the Ministry of Health began contemplating administrative policies that divided national health services into regionalised systems that could cope with military and civilian casualties and support a national blood transfusion service.⁸¹ The London hospital service was divided into ten sectors, each led by one of the teaching hospitals. Casualties flooding into those main hospitals would be relocated to outlying (usually municipal) hospitals, hopefully moving the wounded away from further harm.⁸²

Away from London the regional services were to be coordinated by committees of voluntary and municipal hospital authorities, which would both respond to local conditions and implement national recommendations from the Ministry of Health.⁸³ One future effect of this regional and nationalised planning and general incursion of government into the voluntary and municipal hospital systems was the formation of the National Health Service.⁸⁴ A more immediate effect, as Rosemary Stevens made clear, was the creation of centres providing a range of specialist services for patients with war injuries.⁸⁵ These special centres proved important for the members of the Association of British Neurologists in many ways, and they partially justified calls neurologists would make after the War ended for broader recognition of their specialty.

⁸⁰ "Hospitals in War-Time: Advisers to Minister of Health" Times (London), 8 March 1939, p. 8.

⁸¹ Stevens, *Medical Practice*, pp. 67-80.

⁸² Lovell, *Churchill's Doctor: A Biography of Lord Moran*, pp. 140-141.

⁸³ Stevens, *Medical Practice*, p. 68.

⁸⁴ Charles Webster, *The Health Services Since the War*, pp. 37-198.

⁸⁵ Rosemary Stevens, *Medical Practice*, p. 68.

During the War, special centres were formed throughout Britain to provide medical services to soldiers with brain, spinal, and peripheral nerve injuries, a momentum that continued in the post-war years.⁸⁶ These centres were initially formed for a broad research study being carried out by the Medical Research Council into the treatment of nerve injuries.⁸⁷ In an unprecedented inter-Ministry-Council collaboration, the Medical Research Council offered to coordinate their research project with a regionalised plan to provide services to wounded soldiers with nervous injuries being initiated by the Ministry of Health.⁸⁸ Three MRC committees had been formed to deal with research questions on each type of injury, and each committee had included neurologists, physiologists, and orthopaedic surgeons.⁸⁹ Eventually these committees were combined into one committee for nerve injuries, and by then the Ministry of Health and the Medical Research Council had begun collaborating on treatment and research.⁹⁰

Initially the major research and treatment centres were Wingfield-Morris in Oxford, Winwick in Lancashire, and Botleys Park in Surrey.⁹¹ Treatment centres in Newcastle,

⁸⁶ John Silver, *History of the Treatment of Spinal Injuries*, pp. 52-81; Susan Goodman, *Spirit of Stoke Mandeville: The Story of Sir Ludwig Guttman*, pp. 83-117; For the general context of these centres, see: Anne Hardy, *Health and Medicine in Britain since 1860*, pp. 126-132

⁸⁷ See in the NA, MH 76/159, MEMORANDUM (June 1941) Peripheral Nerve Injuries Committee of the Medical Research Council, pp. 1-9.

⁸⁸ NA, MH 76/159 Ministry of Health Emergency Hospital Scheme: Suggestions in regard to the Treatment of PERIPHERAL NERVE INJURIES OF SERVICE CASES IN THE E.M.S., 5 September 1940. Note, that this source marks the initiation of the joint collaboration.

⁸⁹ NA, MH 76/159, Committee on Peripheral Nerves – a description, 27 September 1940.

⁹⁰ NA, MH 76/159, Francis Fraser to Edward Mellanby, 27 September 1940; Fraser to George Riddoch, 7 October 1940, see also Riddoch to Fraser, 5 November 1941.

⁹¹ NA, MH 76/159, E.M.S.I. 231 – Ministry of Health. Emergency Medical Services. Service Cases of Peripheral Nerve Injury, 30 September 1940.

Liverpool, Bristol, Sheffield, Edinburgh, Glasgow, and Birmingham were soon developed. By 1944 there were twenty-five facilities in Britain for patients with nerve injuries and all provided neurological services. Most of these later centres were treatment facilities only, but at least four were involved in the Medical Research Council research program.⁹²

One general purpose of these treatment centres was outlined in a 1941 Ministry of Health memo:

The object is to secure as much continuity of treatment as possible and to ensure that the patient who needs it is enabled to return to examination and, if required, treatment after a suitable interval. Ideally, all further examination and treatment would take place at the Special Centre where original treatment is given, but the distance of the patient's home and practical difficulties of travel and loss of time may preclude this in many cases.⁹³

Missing from this mission statement was the additional provision that gainful employment for all of the wounded was the ultimate goal.⁹⁴ Also missing was a statement about the research goals of many of these centres, a point often lost upon physicians working in them who were uninformed about the research project.⁹⁵ As the passage also

⁹² NA, MH 76/159, Report E.M.S.I./495 Ministry of Health Emergency Medical Services. Special Units for Peripheral Nerve Injuries, August 1944.

⁹³ NA, MH 76/159, Memorandum, Emergency Health Scheme: Follow-up of certain cases from Special Centres, 2 February 1942.

⁹⁴ *Ibid.*

⁹⁵ One professor wrote to the Ministry of Health angrily: '...these patients are not experimental animals; they cannot be caged up until the end of the investigation and we must allow them to return to a useful existence while providing for the re-examinations that are necessary for the fulfillment of our duty to our

suggests, the logistics of treatment at these centres was not easy to manage. Coordinating treatment at these Centres was an administrative nightmare, because two ministries and the MRC were involved. The Ministry of Pensions was expected to pay transportation costs of wounded soldiers seeking treatment and being followed up. The Ministry of Health was expected to notify the Ministry of Pensions that services were being provided and what was expected for compensation. They were also to make sure that patients came back for additional examinations and treatment.⁹⁶ Finally the Medical Research Council had to coordinate with the other ministries in order to ensure that patients involved in research studies understood that they were supposed to return to their original treatment centres for follow-up examinations and could afford to come back.⁹⁷ The work of these centres has been judged to be of tremendous importance in terms of original research and effective treatment.⁹⁸ Certainly fulfilling the requirements of their general mission statement was no small administrative feat, but how happy patients were with the care they received and what was the long-term impact of the research conducted at them, has not been explored in this study.⁹⁹

patients and the completion of a most important research.' NA, MH 76/159, H. J. Seddon to Francis Fraser, 12 May 1941.

⁹⁶ NA, MH 76/159, *After-Treatment of Service Cases of Peripheral Nerve Injury*, 3 July 1941.

⁹⁷ NA, MH 76/159, MEMORANDUM (June 1941) Peripheral Nerve Injuries Committee of the Medical Research Council, especially pp. 8-9.

⁹⁸ Silver, *History of the Treatment of Spinal Injuries*, pp. 52-81; Goodman, *Spirit of Stoke Mandeville*, pp. 83-117.

⁹⁹ One socially significant impact of these centres was that they introduced the idea of athletic games for the disabled. This in turn led to the Special Olympics. In this Ludwig Guttman at the Stoke Mandeville Treatment Centre for Spinal Injuries was particular important. Goodman, *Spirit of Stoke Mandeville*, pp. 118-146.

There were two effects of this collaborative effort between the two Ministries and British neurology. From 1939 until 1941, the Ministry of Health did not recognize neurologists working in nerve injury facilities as specialists and they were classified as general physicians.¹⁰⁰ This situation was eventually corrected by George Riddoch, an almost forgotten figure in the history of twentieth century neurology.

George Riddoch (1889-1947) was born in northern Scotland and educated in medicine at Aberdeen University, qualifying in 1913. He then became House Physician at the West End Hospital for Nervous Diseases in London, and served at the Empire Hospital for Injuries of the Nervous System during the First World War.¹⁰¹ It was from that period that his interest in nerve injuries dated, and it had been partially stimulated by his mentor and friend, Henry Head. Riddoch was one of the first physicians to receive the support of the Medical Research Council for neurological research. His 1920 research project at the London Hospital focused on nerve injuries, and the subject was one that dominated his research interests throughout his professional career, though he published little on the subject. When War was declared on Germany, Riddoch initially found himself in an EMS Unit at Chase Farm Hospital, which was where the Neurological Department at the London had been evacuated. He eventually accepted a commission as Brigadier General, and 'he devoted himself to the organization of the Army neurological service.'¹⁰² One obituarist, failing to note Riddoch's administrative commitments with the Medical

¹⁰⁰ A typical complaint for neurology around the globe, see: Lothar Kalinowsky and H. Houston Merritt, "The Status of Neurology as a Specialty in Various Countries" *Neurology* Vol. 4 (1954), pp. 668-673.

¹⁰¹ Macdonald Critchley, "George Riddoch (1889-1947)" in *The Ventricle of Memory: Personal Recollections of Some Neurologists*, pp. 155-164.

¹⁰² "George Riddoch, M.D., F.R.C.P.," *British Medical Journal*, 1 November 1947, pp. 711-712.

Research Council, observed that by 1938 Riddoch held administrative posts to the Army, the EMS, and the Ministry of Pensions. It was added,

The development of centres for the treatment of wounds of the brain, spine, and peripheral nerves proved to be an essential part of the medical war effort, but the part Dr Riddoch played in insisting on the need for these centres and in guiding their development may have to some extent been forgotten. His tireless round of visits to those special centres was of great value in developing the remarkably high standard of treatment which was achieved, and this has often been acknowledged by the surgeons in charge of these special units.¹⁰³

Most of his obituaries and biographical notes agree his commitment to these posts quickly turned from normality to over-exertion. Between 1938 and 1947, Riddoch balanced a large private practice, teaching and hospital practice at three hospitals, as well as all his government positions.¹⁰⁴ Testifying to his efforts are the records in the Public Record Office. From 1938 until 1947, Riddoch's name appears everywhere in files pertaining to neurological subjects. His correspondence with the Ministry of Health, the Ministry of Pensions, and the Medical Research Council was voluminous, and the number of different committees upon which his name appears is equally impressive. It was these many-sided commitments and his intensity in completing the work he took on, that led Edgar Adrian to eulogize in the *London Times*, 'His responsibilities were too great to be set aside for care of his own health and he worked to the end with the same

¹⁰³ "George Riddoch, M.D., Aberd., F.R.C.P." *The Lancet*, 1 November 1947, pp. 672-673.

¹⁰⁴ "Dr George Riddoch, Authority on Nervous Diseases" *Times* (London), 31 October 1947, p. 7.

courage which he inspired in his patients. He was a man of great ability, great personal charm, and great integrity.’¹⁰⁵ In many ways, George Riddoch was mainly responsible for initiating and maintaining the standards of treatment in all twenty-five brain, spine, and nerve injuries centres that emerged throughout Britain between 1940 and 1945. He also continually reminded physicians and administrators in those centres of their broader research agenda. More importantly, it was Riddoch who pointed out the problems created by the Ministry of Health’s refusal to recognise neurologists officially.

In a 1941 letter to the Secretary of the Emergency Medical Services, Francis Fraser, Riddoch pointed out that neurologists were encountering a number of administrative difficulties, mainly because of their lack of recognition by government ministries. This had allowed a myth to flourish in nerve injuries centres, that neurological research and treatment requirements fell second place to demands made by orthopaedic surgeons or the general edicts of hospital administrators.

In regard to the Neurologist at each of the Centres in England, I think it would be helpful if they were officially recognized by the E.M.S. as acting in that capacity. As you know, each centre is officially in charge of an orthopaedic surgeon who does not always pass on information to the neurological colleague, and official recognition I think would ease matters. It would also be helpful if communications in regard to treatment and management were sent to the Neurologist at each Centre as well as the orthopaedic surgeon.¹⁰⁶

¹⁰⁵ “Dr George Riddoch” *Times* (London), 1 November 1947, p. 6.

¹⁰⁶ NA, MH 76/159, Riddoch to Fraser, 4 August 1941.

Riddoch felt that the duties of neurologists and orthopaedic surgeons were similar and therefore should deserve equal recognition and status. A compromise between both was always required, and both had more control than hospital administrators commonly recognized.¹⁰⁷ The Ministry of Health initially balked. They were reluctant to recognize neurologists because ‘there are administrative objections to the official recognition of the Neurologists’ and also ‘objections to putting them on the list for distribution of Circulars and Instructions’.¹⁰⁸ What the basis for these objects was is not now clear, but shortly after Riddoch made his complaint the Ministry of Health changed its policy and began recognizing neurologists.¹⁰⁹ Gordon Holmes, who was then neurological representative on EMS Hospital Committee, received a letter indicating the neurologists’ change of status. ‘At the request of Dr Riddoch it has been suggested that...Medical Officers should be recognized as the Neurologists to the Peripheral Nerve Injury Centres.’¹¹⁰ Holmes was delighted by Riddoch’s achievement.¹¹¹ A major national precedent had been set for the recognition of neurologists across Britain.

The substance of the second result from the formation of these centres is harder to judge. In Walter Russell Brain’s papers there is an undated report titled ‘The Organization of Neurology in London After the War.’¹¹² Who this document was for, where it was sent,

¹⁰⁷ Ibid.

¹⁰⁸ NA, MH 76/159, Murchie to Riddoch, 12 August 1941.

¹⁰⁹ NA, MH 76/159, Murchie to de Wesselow, 22 August 1941; Murchie to Patrick, 22 August 1941; de Wesslow to Murchie, 6 September 1941.

¹¹⁰ NA, MH 76/159, Murchie to Holmes, 13 September 1941.

¹¹¹ NA, MH 76/159, Holmes to Murchie, 16 September 1941.

¹¹² ARCP, Russell Brain Papers, W. Russell Brain, “The Organization of Neurology in London After the War”, [undated – c1945-1952], MS 3226/99.

and whether it was ever even used by neurologists, are questions without answers.¹¹³ Despite this, much in this source is worth analyzing. In the conclusions of the Report, Brain suggested several ways neurological services should be expanded. He also suggested in two different places that regionalization of neurological services in Britain would be an exceptional way for providing services to patients across the Kingdom. He noted, for instance, that the policy of the Emergency Medical Services might be expanded by the Ministry of Health and made a permanent feature of future developments for neurology.

The E.M.S. sector service has shown that it is possible to arrange a neurological unit for a Sector applying consultant service to all the hospitals, municipal, and voluntary, in that Sector even though the municipal hospitals belong to more than one authority, the Sector neurological service based upon a teaching hospital. In this way, a specialist service has become available to many patients who would otherwise have been admitted to hospitals where they would not normally be seen by a neurologist. Such a system as this could readily form the basis of a post-war organization, while perhaps ten or twelve sectors of the E.M.S. type would be needed for a neurological medical service, it would probably be impossible to have as many neurosurgical units and arrangements would have to be made whereby two or more sectors would be served by a single neurosurgical unit.¹¹⁴

¹¹³ Descriptive aspects of this document were analyzed in Chapter 2.

¹¹⁴ ARCP. Russell Brain Papers, W. Russell Brain, "The Organization of Neurology in London After the War," [undated – c1945-1952], MS 3226/99.5 and MS 3226/99.6.

It can be inferred without difficulty that Brain was referring to the nerve injury centres being run by the Ministry of Health.¹¹⁵ George Riddoch and Russell Brain had worked together in the Neurological Department at The London Hospital. Riddoch's influence had actually led Brain to take up neurology.¹¹⁶ Brain had administrative ambitions for neurology, and it is difficult to imagine that he was not in regular communication with Riddoch about developments in the Emergency Medical Services. However, because of the paucity of sources on this point, it is difficult to determine in what way either the existence of these new centres or Brain's report influenced the post-war organization of neurological services. Both, however, may have greatly influenced the event that finally brought the members of the Association of British Neurologists back together on the 29th of January 1944.¹¹⁷

Although the members of the Association did not meet throughout the war, it is clear that many of members were thinking in new ways politically. A new lobbying agenda for neurology was partly contrived by the Association of British Neurologists and partly by the Royal College of Physicians. This new agenda brought neurology into its present day condition.

¹¹⁵ Brain obviously knew a great deal about these centres. See his description of them in his obituary of Riddoch. "George Riddoch, M.D., F.R.C.P.", *BMJ*, 1 November 1947, pp. 711-712.

¹¹⁶ 'George Riddoch arranged for me to become the first second HP at Maida Vale Hospital and so began an association which lasted all my professional life' ARCP, Russell Brain Papers, Autobiographical Notes by Lord Brain, MS 3174.10; also see, George W Pickering, 'Walter Russell Brain First Baron Brain of Eynsham. 1895-1966,' *Biographical Memoirs of Fellows of the Royal Society*, 14, (1968), pp. 61-82.

¹¹⁷ AABN, Minutes ABN. Vol. 1, p. 55.

Practice with Action: Members with Meetings

On the 29th of January 1944, twenty-five members – no list is available – of the Association of British Neurologists convened for the first time in five years ‘to discuss questions on the teaching and practice of Neurology and the possible Official Grading of Neurologists in the future.’¹¹⁸ At the close of the meeting six proposals had been adopted, and each would have substantial ramifications for neurology in the near future. The Association’s members voted that the Standing Joint Committee of the three Royal Colleges be asked to recognize the Association of British Neurologists ‘as representing the specialty of neurology’. The Standing Joint Committee had been formed in 1933 between the Royal College of Surgeons and the Royal College of Physicians to ‘consider matters of common concern.’¹¹⁹ Eventually the committee had begun negotiations with the Ministry of Health. Stevens considered the Joint Committee one of the first existing opportunities for specialists and consultants to enter debates on ‘the sphere of national policy and planning’.¹²⁰ The decision of the members of the Association of British Neurologists to request this recognition was therefore a movement towards the national recognition of neurology. However, this effort stagnated in curious ways.

The Association’s members had also proposed that Charles Symonds should represent the Association’s interests on the Beveridge Committee, provided the Royal College of Physicians ask them for a formal representative. Neurologists were showing some

¹¹⁸ Ibid.

¹¹⁹ Viscount Dawson, “Annual Address Delivered to the Royal College of Physicians by the President” (Royal College of Physicians, 1933), p. 2-3.

¹²⁰ Stevens, *Medical Practice*, p. 63.

concern that their financial interests and autonomy should be properly defended in pending debates on national health insurance.¹²¹ They were also unanimous in recommending that psychiatrists and neurologists receive similar training, which should not commence ‘until after one year’s residence in Hospital after qualification’.¹²² This training would be spread over four years, but there would no ‘Diploma in Neurology’ because it was considered ‘highly desirable that all neurologist specialists should possess a higher qualification in General Medicine, as the M.R.C.P., London’.¹²³ It was also planned that representatives of the Royal Medico-Psychological Association should be solicited to form a joint subcommittee with neurologists from the ABN to ‘formulate a scheme for common basic training.’¹²⁴ These proposals marked a new era for British neurology. Such wilful political agitation would have been unthinkable for neurologists even ten years before.

Subsequent ABN meetings in 1944 and 1945 followed the same pattern. The Royal Medico-Psychological Association agreed to meet with representatives from the ABN to discuss the training of neurologists and psychiatrists. The results of those discussions have not been located, although in 1944 the Minutes recommended, ‘that the training and qualifications of specialists in neurology should be discussed at the Annual Meeting.’¹²⁵ At the time the ABN’s Council also recommended that ‘The Royal College of Physicians be requested to set up a Committee to consider the training and qualifications of

¹²¹ Charles Webster, *The Health Services Since the War*, pp. 123 and 188

¹²² AABN, Minutes ABN. Vol. 1, p. 55.

¹²³ Ibid. This was a fairly standard procedure for many specialties. See Stevens, *Medical Practice*, p. 370-375. It is noteworthy that the Diploma in Psychological Medicine was available by 1928.

¹²⁴ Ibid.

specialists in neurology [sic].'¹²⁶ The Committee on Neurology was subsequently formed, and it became an ardent defender of the specialty in Britain.¹²⁷

Generally the years between 1944 and 1950 marked a period of increasing participation in policy-making among the neurologists.¹²⁸ This participation was often half-hearted. In 1947, when a committee for the Ministry of Health was investigating appropriate levels of remuneration for consultants and specialists, the ABN's Minutes noted, 'It was decided to recommend to the committee that whatever terms were agreed for consulting general physicians should apply also to consulting neurologists.'¹²⁹ Although in the subsequent Ministry of Health report, neurology was mentioned (only once) as a medical specialty, one possible effect of their apathy was a conflation of neurology with general medical practice.¹³⁰ As the next section will demonstrate, there are reasons for claiming this as evidence that neurologists still saw little difference between general consultant status and their own – nor, in hindsight, is that unexpected.

¹²⁵ AABN, Minutes ABN. Vol. 1, p. 56.

¹²⁶ AABN, Minutes ABN. Volume 1, p. 57; see also, *ibid.*, p. 58 'The draft of a letter to the Royal College of Physicians requesting the appointment of a Committee to deal with training and recognition of specialists in Neurology was considered and the Hon. Secretary was directed to forward it to the President of the College.'

¹²⁷ Although the Association of British Neurologists requested this committee be formed, the Royal College of Physicians was also involved in forming such committees for medical specialties. See A. M. Cooke, *A History of the Royal College of Physicians of London*, Volume 3, (Oxford: Clarendon Press, 1972), p. 1079.

¹²⁸ AABN Minutes ABN. Vol. 1, for example, see pp. 58, 60, 68, 73-74.

¹²⁹ AABN, Minutes ABN. Vol. 1, p. 80.

¹³⁰ Ministry of Health, *Report of the Inter-Departmental Committee on the Remuneration of Consultants and Specialists* (London: His Majesty's Stationary Office, 1948), for neurologists see p. 6. For the conflation of general medicine with neurology see the Tables on 20-30

This inability (or disdain) for discriminating between neurology and general medicine had a curious and unintended consequence. The crisis in British neurology, which became apparent to many people in the 1950s, derived mainly from ambivalence about definitions. Neurology in the 1940s was thought to require knowledge of pathology, as well as an understanding of the connections between biology and physiology, and experience in numerous day-to-day general medical encounters. The result of these needs was that definitional ambiguity and relativism, as well as a pluralistic outlook, remained reigning hallmarks of neurological practice. Encounters with symptoms took many shapes. There were, for example, psychiatric and somatic signs of nervous diseases. None were necessarily the exclusive domain of neurology, but conditions combining many of those signs frequently required the best skills of a neurologist in diagnosis and prognosis.¹³¹ Such an integrative approach required policy makers to have a special understanding of the field, but neurologists seem rarely to have been able to communicate this aspect of their practice to administrators and policy makers in a way that could be appreciated. The consequence was that neurologists continually highlighted commonalities between general medicine and neurology to their own detriment. From their point of view the relationship between neurology and general medicine was reasonable and could not be disentangled. Externally, however, such accretion might have suggested to policy makers and regional hospital authorities that general physicians could handle neurological work. The outcome was that only a some beds would be

¹³¹ Encounters between clinical practices and scientific practices in the post-war period have been admirably analyzed by Peter Keating and Alberto Cambrosio, *Biomedical Platforms: Realigning the Normal and the Pathological in late-Twentieth Century Medicine* (London: MIT Press, 2003), especially pp. 49-122.

allocated in hospitals for neurological patients, few medical students were trained in neurology, and positions for neurologists were created slowly in the 1950s.¹³² Though the Association continued to meet regularly after 1945, it would not be until the mid-1950s that similar lobbying efforts would appear again.

Practice and Action: the Royal College of Physicians and the Emergence of Neurology

In 1944 the Association of British Neurologists proposed that the Royal College of Physicians be lobbied to form a Committee on Neurology. No evidence is available explaining why, but it can be suspected that this occurred because the 1944 Report of the Inter-Departmental Committee on Medical Schools (also known as the Goodenough Report) completely ignored the existence of a specialty of neurology.¹³³ In December of 1944, the first meeting of the Committee on Neurology convened; thereafter, meetings on neurology would be held intermittently till the present day.¹³⁴

Members of the first Committee on Neurology mirrored the Council of the Association of British Neurologists in 1944. Stanley Barnes, who was from Birmingham and then

¹³² In many ways this was rather strange. In 1949 neurology received the greatest number of distinction awards 'with 71.4% of the incumbents receiving awards.' That individuals' status in the field should have been so well recognized by their peers, while simultaneously the field should remain so marginal in its services, is very hard to explain, unless it is admitted that this had simply always been the status quo. Webster, *The Health Services Since the War*, pp. 315-317; also Lovell, *Churchill's Doctor*, pp. 324-325.

¹³³ Ministry of Health, *Report of the Inter-Departmental Committee on Medical Schools* (London: HMSO, 1944).

¹³⁴ Royal College of Physicians London, Committee on Neurology, (hereafter ARCP, Committee on Neurology), Committee on Neurology, Royal College of Physicians Committee on Neurology Document M.1., 19 December 1944, 13C Minutes of the Committee of Neurology, Volume 1 (1944-1966) Minutes; also see AABN, Minutes ABN Vol. 1, p. 57.

President of the Association of British Neurologists, was the first Chairman of this Committee. He was assisted by: Lord Moran (then President of the Royal College of Physicians but not a neurologist), Anthony Feiling, James Godwin Greenfield and Philip Cloake (who were all members of the ABN's Council). There were also: George Riddoch, Russell Brain, Aubrey Lewis (1900-1975) representing psychiatry, Denis Brinton, Swithin Meadows (1902-1993), Samuel Nevin, Harold Boldero (1889-1960), and John Elkington (1904-1963).¹³⁵

Initially the Committee's terms of reference were the training of neurologists and determining how they should be recognized. They were also concerned with the question of what neurology's relationship was to general medicine and psychiatry.¹³⁶ One final consideration was also raised. There had been tendencies to use 'consultant' and 'specialist' as synonyms. The Committee's understanding of the terms was complex: 'It was generally agreed that the term "consultant" denoted a higher status than the term "specialist" but the Committee were of the opinion that it would not be necessary for this distinction in grade to be made in the subject of neurology.'¹³⁷ The neurologist remained the embodiment of the generalist-specialist practitioner and was always a consultant rather than a specialist. Though the title 'consultant' bridged the gap between specialist and generalist, it emphasized the elite distinctions of the neurologist-physician.

¹³⁵ ARCP, Committee on Neurology, Royal College of Physicians Committee on Neurology Document M.1., 19 December 1944, 13C Minutes of the Committee of Neurology, Volume 1 (1944-1966).

¹³⁶ *Ibid.*, 'The relationship of neurology to general medicine on the one hand, and to psychological medicine on the other, with special reference to hospital and consultant services.'

¹³⁷ *Ibid.*

In retrospect the distinction seems artificial. But at the time two categories were offered: '(1) the consultant neurologists who confined himself to neurology (2) the consultant neurologist who combined the work with general medicine.'¹³⁸ This was an unsurprising continuation of ambiguities from the past, though it was a realistic assessment of the conditions of the present. Despite all best efforts to change to the modern condition, many members of this Committee were representatives of the bygone era of British medicine and could not necessarily envision how social healthcare in Britain would look in the near future. Ten years later much would be different, but in 1944 the neurologists were continuing appreciations and perceptions, which, though threatened by a new social order, had not yet been overturned by new priorities nationalisation would soon create.

These appreciations and perceptions appeared in a Report, which was submitted to the members of the Association of British Neurologists and the Royal College of Physicians in 1945.¹³⁹ The Report described the differences and similarities between neurology and psychiatry, emphasized the closeness of neurology to general medicine, and offered standard guidelines for the training of the neurologist. A special Diploma in Neurology was rejected on grounds that the M.R.C.P. was the lowest qualification any neurologist should possess. Finally, recommendations were offered regarding the organization of neurological services outside London. Among the aims advocated was establishing 'an active neurological department in all medical teaching centres and in such other centres

¹³⁸ ARCP, Committee on Neurology, Royal College of Physicians Committee on Neurology Document M.2., 19 December 1944, 13C Minutes of the Committee of Neurology, Volume 1 (1944-1966).

¹³⁹ ARCP, Committee on Neurology, Royal College of Physicians, *Report of the Committee on Neurology* (London: Harrison & Sons, 1945).

of population as may be considered necessary to cover the needs of the country'.¹⁴⁰ The constant reminders that neurology and general medicine could be united, and that general physicians with training in neurology could provide neurological services, vitiated this language.¹⁴¹ The salient feature of the Report was that it was practical in its aims. If there were not enough neurologists now, then general physicians would be required to treat patients with nervous diseases. Yet the Report insisted that the lack of neurological centres and neurologists was a problem the State needed to resolve.

In hindsight, it is understandable why the Committee adopted this strategy. Describing how the neurologist should be trained, arguing for an increase in the number of neurological centres, and demonstrating how neurology was effectively tied to general medicine and dependent upon other clinical specialties, was no small feat. This was the most concise, programmatic statement ever issued on the state of neurology in Britain.

Its message, however, could be easily misinterpreted. One failing of the Report was that it never explained what neurologists did and why their practice was important. The only justification given for neurology was historical:

Neurology was one of the first medical specialties to be recognized and to be accorded a status of its own. During an important period in the history of medicine it was the most

¹⁴⁰ Ibid., 15.

¹⁴¹ See, for example: Ibid., 16.

active growing edge of the subject and formed an ideal point for the entry of the scientific method into clinical medicine.¹⁴²

There can be no doubt this historical claim was significant from the Committee's perspective, but it should be appreciated that non-neurologists might have viewed it differently. Was it arguing that the important period in medical history was now over? Was it contending that because neurology had done so much for medicine in the past, it merited support now; or was it suggesting there would be future contributions no less significant than those of the past? Perhaps, it was asserting all of the above? The historical argument was vague, and there was no sense of what was promising or immediately relevant about neurological practice. Adding to the dilemma was the Report's conciliatory tone with psychiatry and general medicine. Its pluralism was confusing: On one hand, psychiatry and neurology were close because 'each is concerned with the function of the brain.'¹⁴³ On the other hand, 'neurology remains a part...of general medicine.'¹⁴⁴ Any reader – lay or medical – could be forgiven for wondering what then was necessary about neurology *per se*. Obviously this lack of clarity was not the intention of the Report. In retrospect, however, the outcome was damaging to neurology's status. This was reflected in later meetings of the Committee, and the actions it and the Association of British Neurologists took to counteract what appeared to be a crisis in neurology in the 1950s.

¹⁴² Ibid., 4.

¹⁴³ Ibid., 6.

¹⁴⁴ Ibid., 7.

From a view of the sources, the Association of British Neurologists during the early 1950s appears to not have been adept at handling this apparent political crisis. The exact nature of this crisis is now only succinctly summarized, although aspects of it (such as why it was thought to be one) will be further explored in the conclusion. In 1950, two years after the National Health Service had been established, a critical investigation carried out by the Ministry of Health explored how the consultant medical service could be expanded throughout Britain.¹⁴⁵ Emphasis was placed on neurology and cardiology's special relationship to general medicine. 'General physicians, will...need to undertake some neurological and cardiological work.'¹⁴⁶ While it was acknowledged that neurologists and cardiologists would be required in Regional Centres, it was found that 'it is undesirable that general medicine should be so rigidly sub-divided that all the cardiological or neurological work becomes concentrated in the hands of consultants engaged only in those subjects.'¹⁴⁷ The investigation was not hostile to neurological specialization, but neither did it hold out hope for a rapid change in circumstances. 'There are not yet enough neurologists to provide a complete neurological service, and it will be necessary at first to make use of physicians who do not restrict their practice entirely to this specialty.'¹⁴⁸ Neurological departments still did not exist in most of the Regional Centres and 'such a comprehensive arrangement is not likely to be feasible for some years.'¹⁴⁹ There were not enough beds for neurological patients, and consequently

¹⁴⁵ Ministry of Health, *National Health Service: The Development of Consultant Services* (London: His Majesty's Stationary Office, 1950).

¹⁴⁶ Ibid., 11.

¹⁴⁷ Ibid., 12.

¹⁴⁸ Ibid., 27.

¹⁴⁹ Ibid.

‘patients admitted to hospital with nervous diseases cannot be directly under the care of a neurologist’ and would be in the care of a general physician ‘with a special interest in neurology.’¹⁵⁰ There were too few neurologists, almost no neurological departments, and neurological beds were located in general medical wards. The unintended consequence of claiming that neurology and general medicine were closely aligned, was that it allowed top-down pressure at both national and regional levels to flourish and drive neurologists into general medical positions.¹⁵¹ Overall, the Ministry of Health recognised the problem as being national, but it offered few solutions for changing circumstances. Regional Hospital Boards preferred these circumstances to hiring a fulltime neurologist, because it effectively meant that patients were treated, but there was no need to form a neurological department.¹⁵²

The Association of British Neurologists left this situation unchallenged. Between 1950 and 1955 the only significant move they took was to ask that all International Neurological Congress Planning Committees recognize the Association as officially representing neurology in Britain.¹⁵³ Was this apathy about British neurology’s domestic status? It is unlikely that most British neurologists were concerned, as the President of the Royal College of Physicians London was now Walter Russell Brain.¹⁵⁴ Brain’s presence

¹⁵⁰ Ibid.

¹⁵¹ This problem represented the general crisis within the Health Service. Lovell, *Churchill’s Doctor*, pp. 291-311.

¹⁵² ARCP, Committee on Neurology, Royal College of Physicians Committee on Neurology, 23 February 1953, 13C Minutes of the Committee of Neurology, Volume 1 (1944-1966).

¹⁵³ AABN, Minutes ABN. Vol. 1, pp. 144-145.

¹⁵⁴ Brain held this position from 1950 until 1957. No full biography exists. Sources include: George W Pickering, “Walter Russell Brain First Baron Brain of Eynsham. 1895-1966,” *Biographical Memoirs of*

was reassuring. At the 1954 Annual Meeting of the Association of British Neurologists, which was held at the Royal College of Physicians, Brain toasted Anthony Feiling, the new President of the ABN, and referred 'to the important place of neurology'. So far as Brain was concerned, despite the current crisis, neurology would endure for eternity.¹⁵⁵

The Committee on Neurology, at the request of Brain, reconvened in 1953. Its terms of reference were: 'the training of specialists in neurology, the conditions of recognition as a consultant in Neurology', and 'any other matters of importance to the development and welfare of neurology'.¹⁵⁶ Its Report on the position of Neurology was published in 1954, and was far more strongly worded than its 1945 predecessor.¹⁵⁷

A neurologist, the Report stated clearly, was:

a trained physician with a higher qualification in medicine who has received the necessary special training and experience in neurology and proposes thereafter to devote himself to that specialty. This definition does not include those general physicians who have gained some experience in neurology in the course of their training in general

Fellows of the Royal Society, 14, (1968), pp. 61-82; ARCP, Russell Brain Papers, W. Russell Brain, Autobiographical Notes by Lord Brain, MS 3174.10-3174.11; "Lord Walter Russell Brain," *The Lancet*, 1 (1967): p. 55; "Lord Walter Russell Brain," *BMJ*, 1 (1967), p. 56.

¹⁵⁵ AABN, Minutes ABN. Vol. 1, p. 163.

¹⁵⁶ ARCP, Committee on Neurology, Royal College of Physicians Committee on Neurology, 23 February 1953, 13C Minutes of the Committee of Neurology, Volume 1 (1944-1966).

¹⁵⁷ Royal College of Physicians, *Interim Report of the Committee on Neurology* (London: Harrison & Sons, 1954).

medicine and who include an interest in neurology as part of their general medical practice.¹⁵⁸

This definition was essentially a corrective to misinterpretation of the role of the general physician with an interest in neurology. It was also a profound shift towards the total specialization of neurology. Indeed, the Report conflicted with prevailing attitudes about medical specialization. Noting that the subject specialization was ‘controversial’ and ‘difficult’ and that many felt specialization was undesirable, the Report claimed:

Echoes of this controversy can be heard in the present context and the view is held by some in influential positions that in the provinces it is better, on the whole, that the neurology should be done by general physicians and that both the practice and teaching of general medicine might be impoverished by the appointment of more neurologists.¹⁵⁹

The Committee attacked that position. Circumstances in neurology were now ‘worse’ under the National Health Services than they had been in 1945.¹⁶⁰ They were worse, not because neurology was unnecessary, but because the Government and the Regional Hospital Boards for reasons of ‘financial stringency’ had committed themselves to an anti-progressive alliance ‘contrary to the best interests of the Health Service’.¹⁶¹ It was recommended that active neurological departments be immediately established ‘in all medical teaching centres and in such other centres of population as may be considered

¹⁵⁸ My emphasis. *Ibid.*, p. 4.

¹⁵⁹ *Ibid.*, p. 8.

¹⁶⁰ *Ibid.*, quote on p. 5, see pp. 5-8.

¹⁶¹ *Ibid.*, p. 8.

necessary to cover the needs of the country.’¹⁶² Moreover, no neurosurgical centre should be established without positions for neurologists. The Report ended with a polemical but rhetorically powerful blow:

[The] Committee desires to draw attention to the serious long-term effects of the policy at presented adopted in the Health Service in relation to neurology. After the war, relying on the promised expansion of the consultant services and being aware of the need for more consultant neurologists, a considerable number of ex-service graduates undertook and completed their training as neurologists. Of these, only 15 per cent. have been able to find reasonable employment...in this country. At least five have emigrated. Promising graduates now regard the prospects as so discouraging that they are becoming increasingly reluctant to enter a branch of medicine in which this country is pre-eminent.¹⁶³

The sub-text of this last comment can be easily inferred. The Health Service was wasting talent by not offering opportunities for young graduates, and it was undermining the long-term quality and fecundity of its neurological service. British neurology had led the world in the 1930s, and now that distinction was being systematically dismantled as a result of government policies. This was powerful rhetoric, and it bore the stamp of incontestable authority. The President of the Royal College of Physicians had signed the report. There was no pluralism in the Report. Neither was there relativist phrasing. Clinical neurology

¹⁶² Ibid., p. 9.

¹⁶³ Ibid., p. 9.

was constructed as an absolute clinical specialty, independent from both general medicine and psychiatry.

Not surprisingly, such strongly worded language was not greeted with enthusiasm. Even members of the Comitia of the Royal College of Physicians were anxious that the tone of the Report be mollified and thought the case had been 'exaggerated'.¹⁶⁴ One member, wondering what neurologists actually did, tactlessly pointed out to Russell Brain that neurology's problem was not its specialization but its inabilities. 'If they looked at the work done by the present neurologist, they would find that his time was completely taken up with a very long waiting list in outpatients, with chronic epileptics and similar cases, most of whom he cannot help at all.'¹⁶⁵ Another, more constructively suggested, the problem was mainly financial. However, a third member stressed that the crisis was neither economical nor political. The trouble was a social one within the profession of medicine. The Regional Boards were not reluctant to hire neurologists. Instead the medical advice they received neglected neurologists. 'His impression was that many physicians would not welcome neurologists. They would rather have another general physician with a special interest in neurology.'¹⁶⁶ The point is that because the Report

¹⁶⁴ ARCP, Committee on Neurology, Document 11. Discussion of the Interim Report of the Committee on Neurology by the Council, April 1954, 1-7, 13C Minutes of the Committee of Neurology, Volume 1 (1944-1966).

¹⁶⁵ *Ibid.*, p. 3.

¹⁶⁶ *Ibid.*, p. 6.

In 1959, when the World Federation of Neurology was founded, the Association of British Neurologists was recognized by it as the official body, 'speaking on behalf of Great Britain in neurological matters'.¹⁷³ All further influence the Neurological Section of the Royal Society of Medicine might have had in either domestic or international neurology ended in 1960.¹⁷⁴ Political and social control of neurology was now entirely consolidated within the Association of British Neurologists.

Conclusion

As Weisz has noted, the specialization of medicine in Britain has always been a tenuous process. This Chapter has attempted to locate the final emergence of neurology by exploring the history and context of the Association of British Neurologists. The formation of this new Association in 1933 was the result of a number of indirect developments that had been accumulating in the 1920s and aiding the emergence of neurology as a distinct specialty. This, however, was not enough to define neurology. Members of this community, sometimes at the official request of the Council of the ABN and other times of their own accord, engaged in practices and actions that invariably aided the emergence of neurology in international, national, and local contexts. Seeking and acquiring Rockefeller funding and MRC backing for neurology created a significant precedent for neurology. The legitimacy bestowed upon neurology via Rockefeller funding transcended simple patronage. It affirmed the high status of neurological research

¹⁷³ Ibid., p. 230.

¹⁷⁴ Ibid, p. 234. In 1960 written confirmation of this status was sent by the Neurological Section of the Royal Society of Medicine. The Association of British Neurologists effectively represented neurology in all of its political aspects in the United Kingdom. See, Ibid., p. 244.

in Britain. Procuring patronage, however, had required signs of action. Participation in the meetings of the Association of British Neurologists provided an appropriate venue for demonstrating those actions. It also provided new autonomy within British medical culture that no past professional society in which neurologists participated had ever offered.

Even though the Association did not meet from 1939 until 1944, many of its members, especially George Riddoch, were involved in forging new precedents for neurology within the Ministry of Health and the Medical Research Council. The collaboration that occurred between those ministries eventually led to a formal request from the Ministry of Health that neurologists be recognised by hospitals and provide centralised treatment for patients with injuries of the nervous system. This created a precedent for further governmental recognition of neurology.

In 1944, when the Association reconvened, it requested that the Royal College of Physicians form a Committee on Neurology. Details from this Committee's archives suggest that this regionalized system of centres for patients was used as one means of justifying further appeals for teaching hospital and major medical centres outside London to develop Departments of Neurology. The Committee also wrote new training guidelines for students aspiring to become neurologists. Still, even in 1945, when those recommendations were published, the Committee on Neurology was unable to articulate a language for neurology that demonstrated the specialty's pertinence for the modern world. In the mid-1950s this situation began to change, thanks in part to a strongly

worded Report issued by the Committee of Neurology and approved by the Association of British Neurologists. The outcome of this Report was an encouraging attempt by the Ministry of Health to aid neurology's development. By 1958, Russell Brain was appointed Advisor in Neurology to the Ministry of Health. This new alliance between the Ministry of Health and neurology led to a rapid growth in neurological services throughout the 1960s and 1970s. At the same time, the Association of British Neurologists came to represent British neurology in all facets. A century after the first hospital for nervous conditions had been founded; practice and action had finally ordered neurology's knowledge into a codified and controlled medical specialty.

CHAPTER 8: CONCLUSION

Defining British Neurology: the Idioms of Practice

'Pigeon hole'¹

*I well recall on one such [ward] round being invited to comment on a young woman with lymphocytic meningitis who happened to have one extensor plantar response and of whom I casually enquired as to whether there had been a sick dog in the household, to which she responded readily and positively. I only raised that question because I had just read an article in The Lancet about canicola fever presenting in this way, and to my amazement that turned out to be the correct diagnosis. It is upon such serendipitous events that clinical reputations sometimes depend.*²

Lord Walton of Detchant, 1993

In his 1908 Fitzpatrick's Lecture on the history of neurology, Leonard Guthrie (1858-1918) began his lecture with a quote from Auguste Comte, 'The older the World grows, the more the living are indebted to the dead.'³ He then added,

some of us may be led charitably to credit our ancestors with greater knowledge and foresight than they had. Their glimpses of discoveries may seem to merit the distinction of making them. Often they were very near the mark, yet it is true that facts and inferences which seem obvious to-day eluded them. Blinded by prejudice and allegiance to authority they sometimes failed to grasp knowledge which, like Justice in Plato's

¹ In popular idiom, 'pigeon hole' means to fit something into a category that is not quite suitable as a descriptor.

² John Walton, *The Spice of Life: From Northumbria to World Neurology* (London and New York: Royal Society of Medicine, 1993), p. 158.

³ Leonard Guthrie, *Contributions to the Study of Precocity in Children, The History of Neurology: the Fitzpatrick Lectures on the history of medicine delivered at the Royal College of Physicians in the years 1907, 1908* (London: Eric G Millar, 1921), p. 71.

model state, 'lay rolling at their feet'. It is necessary to avoid either extreme, and to dwell merely on the facts which were known and the views which were held in ancient times without exaggerating their number and importance. Yet, indeed, their number and importance were great...and so I cannot indulge in reflections on the human interest which is attached to the lives...of the founders of Neurology.⁴

For Guthrie, Auguste Comte's (1798-1857) positivism was the means for unravelling neurology's past triumphs. In the nineteenth century, Comte had emphasised that the causes of events could be linked to historical occurrences, and that those events could be read in the actions of individuals or social and political movements. The value of those movements – artistic or scientific – could then be judged for their contribution to human progress.⁵ When Guthrie set out the period of his account, it spanned from the 'fifth century B.C.' to the 'first quarter of the nineteenth century'. He thus began the precedent of linking neurology with a research tradition originating in antiquity and culminating in the Modern Age.⁶

That Guthrie's analysis consequently functioned to re-script the past into terms that explained his view of neurology's present status should in no way diminish his account for us now. What appears now as a whiggish perspective also highlights the important function historical discourses played (and play) in the emergence of neurology and the

⁴ Ibid., pp. 71-72.

⁵ Smith, *Human Sciences*, p. 422, but see pp. 421-433.

⁶ The other history of neurology from this period was that published by Fielding Garrison in an historical chapter in Charles Dana's *Textbook of Nervous Diseases*. For a discussion, see Lawrence McHenry, *Garrison's History of Neurology*, ix-xiii.

defining of its practices. Following Guthrie's history, other sweeping histories of neurology recounted similar stories, many adopting similar chronologies. Guthrie's account brings to mind an observation on the 'ideology of "informing" through books' made by Michel de Certeau in his study, *The Practices of Everyday Life*. De Certeau described the practice of book production as a dialectic between a creative enterprise and enforced naive consumption, and he wrote that 'by challenging "consumption" as it is conceived and...confirmed by "authorial" enterprises, we may be able to discover the creative activity where it has been denied that any exists, and to relativise the exorbitant claim that *a certain kind* of production (real enough, but not the only kind) can set out to produce history....'⁷ For de Certeau the defining of expertise and knowledge through writing produced an ideology that saw the consumer as a receptacle. In other words, readers are taught not to question the basis of authorial expertise by the producers of knowledge, be they 'authors, educators, or revolutionaries'.⁸ In Guthrie's positivistic account of the history of neurology, it is possible to witness such an authorial enterprise at work and to see a particular kind of production producing 'an informed' approach to neurology's history. This dissertation, by contrast, has sought to show how writing historical accounts like these was one practice (among others) laying the foundations upon which the clinical specialty and academic discipline of neurology flourished.

An analysis of several texts is warranted here for illustrative purposes. It is striking that William Gowers could give a lecture in 1899 titled 'The New Neurology' and find in the recent work of physiologists and pathologists foundations for a new clinical practice –

⁷ De Certeau, p. 167.

⁸ Ibid.

clinical neurology.⁹ On the other hand, just nine years later, Leonard Guthrie could write a synoptic history of neurology that told a story about an all-encompassing knowledge originating in antiquity. Even if most practitioners in 1908 would have readily admitted William Gower's perspective, it was Guthrie's positivistic approach that prevailed as a tradition for telling and informing readers-qua-consumers about the story of neurology. In 1924, for example, Edward Farquhar Buzzard proclaimed in his Presidential address before the Neurological Section of the Royal Society of Medicine that 'neurology was the oldest of the medical "ologies"'.¹⁰ Ten years later, although he admitted that the progress of neurology in his lifetime had been unprecedented, James Collier (1870-1935) described neurology's 'present position' as 'highly advanced for a civilisation...not yet sixty centuries removed from primitive man.'¹¹ What was to be tacitly understood by practitioners, students, and non-professionals alike from such authorial enterprises, was that neurology was a universal language and knowledge that had always existed in different forms. Modern neurology was the apogee of a natural evolution that had begun with pre-modern philosophy.¹² Neurology was to be understood as the natural transition from philosophy to scientific-medico practice. Though this positivist story did not really make physicians philosophers, it confirmed and legitimated their status as scholars,

⁹ William Gowers, "A Lecture on The New Neurology" (1899), pp. 71-73. Though, I would note this article was in the positivist tradition as well.

¹⁰ E. Farquhar Buzzard, "Reports of Societies: The Evolution of Neurology and Its Bearing of Medical Education," *BMJ* (1924), p. 718.

¹¹ James Collier, "Inventions and the Outlook in Neurology" *The Lancet* (1934), p. 859.

¹² Guthrie's account, speckled with Ancient Greek and Latin quotations, considered founders of neurology to include such figures as Aristotle, Socrates, Hippocrates, Herophilus, and Erasistratus

which, as Foucault remarked, were ‘fully engaged in the’ interpretation of the ‘philosophical status of man’.¹³

There were many shared, creative elements producing this history of neurology. Primarily, neurology was depicted as an all-encompassing and heterogeneous knowledge. This view, though arbitrary, allowed authors like Guthrie to write wholly separate intellectual spheres of past human endeavour into chapters of neurology’s narrative of progress. Others followed his efforts. In 1923, for example, one author stated, ‘we do not know when the term “neurologist” came into vogue, nor for that matter can we define the limits of his specialty, but we have always supposed it concerns the totality of the problems presented by the nervous system in health and disease.’¹⁴ In 1933, echoing these remarks, Francis Walshe offered some examples:

Neurology makes a strong appeal to men of many interests and diverse temperaments. The man with a flair for clinical medicine finds no branch of the subject that offers him more fascinating exercises; for the pathologist, the nervous system is a rich mine of problems awaiting discovery and solution; for the biochemist, it offers a new world scarcely yet explored, while for the experimental physiologist, it has been the scene of some of his greatest triumphs.¹⁵

¹³ Foucault, *Birth of the Clinic*, p. 198.

¹⁴ “The Future of Neurology,” *The Lancet* (1923), p. 792.

¹⁵ F M R Walshe, “Training of the Neurologist” *Archives of Neurology and Psychiatry* Vol. 29 (1933), p. 381.

Thus, neurology was a subject upon which various figures from various fields might focus their intellectual energies. Yet, Walshe was also not unique in asserting that the neurologist was defined by another no-less historical idiom, the clinical method:

However wide and deep may be the individual's knowledge of the anatomy, physiology or pathology of the nervous system, however cunning his hand and judgment in surgical technique, he is not and cannot become a neurologist in the full sense of this word until he is conversant with the phenomena and natural history of diseases of the nervous system and is the master of the clinical method.¹⁶

In 1945, an editorial in the *British Medical Journal* made this point as well, and embellished it further by claiming that diagnosis was an end in and of itself in neurology:

The function of the neurologist in one way differs from that of the practitioners of some other aspects of medicine – e.g., psychiatry, tuberculosis – for the neurologist is a consultant rather than a specialist; he is a judge who sums up and advises as to the nature, origins, outcome of an illness and the disposal of a sick person, and he is not the purveyor of a particular line of treatment.¹⁷

Even fifty years following Guthrie's 1908 lecture, Walter Russell Brain lectured at the Royal College of Physicians Edinburgh on, 'Neurology: Past, Present and Future'. He began his lecture with the question, 'What is neurology?' Like his predecessors, Brain

¹⁶ Ibid.

¹⁷ "Neurological Training of the Future" *BMJ* (1945), p. 292.

answered by demarcating the broad terrain – though he, unlike other authors, grounded his views in a historical account of the journal *Brain*.

The subtitle of the journal *Brain* is “A Journal of Neurology,” and the scope of that journal may therefore be taken as a useful index of the scope of neurology. Any volume...contains articles on the physiology, anatomy, and biochemistry of the nervous system, on neuropathology, on the psychological and psychiatric aspects of nervous disorders, and on clinical neurology, including neurosurgery. In the most comprehensive sense, then, neurology comprises all aspects of the normal and abnormal functioning of the nervous system. In one important respect neurology differs from all other branches of physiology and of medicine: it is concerned with that part of the human organism which is most distinctly human, and it is therefore unique among branches of medicine in the extent of its contributions to scientific knowledge beyond the scope of animal physiology, through its study of the neural basis of all the psychological and physiological functions of man.¹⁸

Although he noted neurological observations had been made since ‘the earliest of times’, Brain admitted that it seemed that it was in the nineteenth century that the unprecedented period of neurological nosography began. This had been followed by profound innovations in twentieth century physiology, neurosurgery, electroencephalography, and psychological and psychiatric understanding; all of which had contributed to fundamental ‘understanding of how the nervous system works’.¹⁹ Continuing the pattern of rendering neurology’s occupational status opaque, Brain insisted that the differences between

¹⁸ Russell Brain, “Neurology: Past, Present, and Future” *BMJ*, 15 February 1958, p. 355.

¹⁹ *Ibid.*, p. 358.

psychiatry and neurology, though in some sense appropriate, were a matter of degree, because 'it does not follow the present division between the two subjects is made in the right place.'²⁰ Similarly, he argued that even if neurologists were trained in specialist hospitals, their necessity in general hospitals and in general medical practice was easily seen. The contribution of clinical neurology and neurologists to general medicine, psychiatry, physiology, pathology, as well as other subjects, existed because all contributed in some way to neurological knowledge. The relationships between these fields were reciprocal, and each explicitly revealed the complexities of medical practice.

Moreover, this very diversity and complexity were signs that progress had been made; the social process of medical specialization had led to a profound growth in knowledge. 'What I have said well illustrates,' Brain asserted, 'the rich contribution specialization has made to medicine.' Specialization had spawned an accumulation of knowledge that had invigorated the status and productivity of neurology, and therefore medicine. However, this social revolution had not been without its terrifying consequences. Brain remarked, 'far from knowing more and more about less and less, the specialist, like every one of his colleagues in medicine, needs to know more and more about more and more'. What then was the neurologist? The answer, Brain felt, was to be found in an extract from the 1887 writings of Hughlings Jackson, which he then quoted:

As scientific medical research goes on, there is greater specialisation of investigation, just as, in the development of society, there is that continually increasing specialisation, called division of labour. This being so, all the more need is there that there should be

²⁰ Ibid., p. 359.

greater integration, just as along with the division of labour there is need for co-operation of labourers.²¹

Russell Brain thought Hughlings Jackson's view strikingly appropriate. Hence, even as he broke somewhat with the usual positivistic historical tradition that located neurology in antiquity, Brain reasserted Hughlings Jackson's worldview, which derived wholly from Herbert Spencer's positivist writings. Thus, Brain was substituting one positivist tendency in historical writing for another in his declared preference for integration. Integration, he asserted, remained the neurologist's highest calling, and his or her most difficult charge:

If we ask what part neurology is to play...the answer begins to emerge from our survey of the scope of the subject. Neurology plays a part in physiology, psychology, psychiatry, pathology, bacteriology, medicine, surgery, and no doubt other disciplines, and all of these in their turn have a contribution to make to neurology. What, then, is the role of the neurological physician? The fact that he alone is commonly called a neurologist surely reflects his key position in relation to neurology. The process of integration...is more likely to be successful if there is an integrator; and the neurologist, though he cannot possibly be an expert in all these fields, is the person most fitted by training, experience, and opportunity to be a nodal point in the relations of neurology.²²

²¹ My emphasis. Hughlings Jackson quoted in *Ibid.*, p. 359 from Hughlings Jackson, *Selected Writings* (London: Hodder and Stoughton, 1932).

²² *Ibid.*

The neurologist's function was to work at the centre of overlapping spheres of clinical and scientific knowledge. The neurologist, as a ganglion, embodied the co-operative labourer, a synthesizer, a practitioner at the centre of medicine and science's many imbricate divisions. Neurologists, through the proclivities of their training, knowledge, and expertise, were prepared to act in a tacit operational mode that manufactured 'commensurability' between the multiple ways of believing and knowing in various arenas of science and medicine. Moreover, because of the rigours of their practice (clinical and otherwise), neurologists could broker negotiations between traders in medicine's disparate practices; they were the creators and translators of the universal medical language. For Brain, this was what differentiated the neurologist occupationally from the general physician that treated patients with nervous diseases. Some believed, he observed, that what neurologists did, general physicians could do just as well. This mistaken view he refuted with a parable from *Alice in Wonderland*:

The Pigeon in *Alice in Wonderland* insisted that Alice must be a serpent because she ate eggs. "'Little girls', said Alice, 'eat eggs quite as much as serpents do, you know.' 'I don't believe it,' said the Pigeon, 'but if they do, they're a kind of serpent, that's all I can say.'" The logic of the Pigeon sometimes finds expression today. Many kinds of doctors rightly see patients with nervous disorders, but the future of neurology in this country still depends upon its ability to attract, train, and provide satisfying work for neurologists of equal calibre to those whom we owe the achievements of medicine and science in the past.²³

²³ Ibid., p. 360. It is interesting to note that when Alice reflects on this argument, the pigeon interrupts her meditations by asserting that either way Alice is looking for eggs, and so it does not matter whether she is a little girl or a serpent at all. Thus, Brain's use of this parable fails by the very logical point he was trying to

Brain was suggesting that some believed that because general physicians saw patients with nervous diseases, they were a kind of neurologist; or, alternatively, because neurologists saw patients with nervous diseases (i.e. systematic disorders), they were a kind of general physician – both were instances of the pigeon's logic. Neither view, according to Brain, properly understood the neurologist's role. The neurologist's importance derived from the position of his or her practice. Defining the neurologist meant firstly recognising that his or her practitioner space was defined by idiomatic rules that took as standard, the neurologist's all-encompassing view, desire to integrate various knowledge(s) together, and continual efforts to consolidate and construct bridges between academic and clinical worlds. This was practice seemingly of an un-definable type. Unlike other medical specialties that limited their views to succinct areas of knowledge, practice, or technical interventions, neurology for Russell Brain in contrast, was a specialty defined by its lack of limitations.

Other similar examples could have been provided here of arguments like these – possibly one for every year between Guthrie's 1908 and Brain's 1958 lectures. If these arguments and histories changed somewhat by the time Brain wrote his historical analysis, many of their features remained the same, with perhaps one chief variation. By the 1950s, as the last chapter suggested, many British neurologists were reconsidering (sometimes readily decrying) their field's current institutional status and lack of original research relative to

make. I am tempted to wonder if his audience agreed with the pigeon. See Lewis Carroll, *Alice in Wonderland and Through the Looking Glass* (Puffin Books, 1962), pp. 75-76.

the progress of the past.²⁴ Strangely, at a time when neurology was represented institutionally and politically better than it had ever been before, many clinical neurologists saw the status of their field as worse than it had ever been.

As a general example, a meeting to consider ‘the Future of Neurology’ was held at the offices of the Medical Research Council in 1960. A number of neurologists met to consider the status of neurological research, which they believed to be in decline. They began by defining neurology in the usual broad fashion; neurology as usual ranged ‘from physiology on the one hand, through neurochemistry, clinical neurology and neurosurgery, to psychiatry and psychology at the other extreme.’²⁵ The committee then discussed the current ‘crisis’ of neurological research and concluded that little original research was being conducted at all. Eventually they agreed upon the following corrective:

It was agreed that the central problem was to bring together different scientific disciplines having a bearing on neurology. This could be done in several ways (a) by training clinicians in a separate discipline (e.g. biochemistry or immunology), (b) by bringing

²⁴ For instance, see Charles Symonds, “Reorientations in Neurology” *The Lancet* (1949), 677-680; Derek Denny Brown, “The Shattuck Lecture: The Changing Pattern of Neurologic Medicine” *The New England Journal of Medicine*, Vol. 246, No. 22 (1952), p. 846. Also see, “Neurology Advances” *The Lancet* (1952), p 325; “Neurology: A Weak Position” *The Lancet* (1954), p. 1021; Francis Walshe, “The Future of Neurology” *PRSM* (1955), pp. 120-124; Denis Brinton, “Presidential Address: The Development of Neurological Services under the Ministry of Health” *PRSM* Vol. 53 (1960), pp. 263-264.

²⁵ NA, FD 23/172, Minutes on Discussion on Neurological Research, 7 July 1960, pp. 1-2.

persons within other disciplines into close contact with neurologists and neuropathologists, (c) by grouping relevant University departments or research units.²⁶

However, not long after this meeting, the then Secretary of the MRC, Harold Himsworth (1905-1993), decided to conduct an internal audit to discover exactly how much neurological research the MRC had been supporting. The results were startling. Despite the protests by clinical neurologists that little or no original research was being conducted, the internal audit found that neurology had received research grants totalling approximately £317,000 between 1955 and 1960.²⁷ In a revealing letter to Russell Brain, Harold Himsworth wrote, 'I also was startled when I saw the very large number of people at so many different centres who were interested in neurological research, and the inferences from this are rather disturbing...I think that everybody was rather taken aback by the evidence of the large number of people at work and the implications of this.'²⁸ Clearly, a substantial disconnection existed between what clinical neurologists believed was being done in research, and what was being conducted actually throughout the country – a point that had even eluded the MRC.

From this discussion, two stories emerge. On one hand, in its historical tradition, neurologists created a romantic past, a place of heroic endeavours. On the other hand, in the 1950s and 1960s, neurology had made enormous professional gains, even from its status in the 1930s, the time when its professional emergence began. The Association of

²⁶ Ibid.

²⁷ See NA, FD 23/173, Expenditures on Neurological Research, 1960.

²⁸ NA, FD 23/174, Harold Himsworth to Russell Brain, 13 February 1961, Discussion on Neurological Research.

British Neurologists had been formed in a social stew filled with international solidarity in neurology, philanthropy for neurological research, plus a dash of intrigue and recrimination. It had quickly transformed from an elite medical club into a powerful lobbying association. Indeed, one capable of challenging structures within the medical profession vis-à-vis the Royal College of Physicians and the Ministry of Health. Whereas, in 1919, for instance, there had been only a few small departments of nervous diseases, by 1960 most hospitals, regional centres, as well as many smaller subsidiary centres, had neurology departments. Though many general physicians still practiced some neurology in 1960, by 1965 a Royal College of Physicians Report published by the Committee on Neurology could state emphatically that such physicians were ‘outmoded, for neurology cannot be practised efficiently by a general physician’.²⁹

Despite these changes in professional circumstances, neurology’s past retained a healthy allure, while its present was circumscribed by a ‘declinist’ rhetoric. When Gordon Holmes died in 1965, the author of his *London Times* obituary, describing him in heroic terms, hinted at a gloomy forecast for neurology generally:

It is of interest to put on the record, in the highly organised medical world of today, that the principal scene of Holmes’ labours was a small voluntary hospital, which though for many years a world-famous school of neurology, was neither recognised nor supported by a university. His very numerous additions to medical knowledge were the hard-won fruit of the unsubsidised labour of the spare time of a physician who was also engaged in

²⁹ Royal College of Physicians Committee on Neurology, *The Neurological Services in Great Britain* (H&S Ltd., 1965), p. 5.

and dependent upon private practice. This of course had been equally true of his predecessors in the National Hospital: Jackson, Ferrier, Bastian, Gowers, and Horsley – some of the greatest names in modern neurology – and Holmes was perhaps the last of this remarkable group of men; all inexhaustible, forceful, and immensely able, who created the prestige of British neurology out of their own intellectual resources....³⁰

The existence of such a declinist view of neurology, though remarkable, is explicable. Though neurology was transformed between 1880 and 1960 in various ways with changes in medicine's overall social and political structure, certain continuities in its practice remained. Neurology in 1880 was broadly defined; practitioners would understand it that way, even in 1960. From the point of view of neurology's many practitioners at any point between 1880 and 1960, the scope of the subject's practices made professionalisation around a defined, delimited, or demarcated jurisdiction impossible.³¹ In historical writing especially, neurology was depicted as a vast subject studied throughout the ages.³² This view of neurology, a disposition, was one that

³⁰ My emphasis. "Sir Gordon Holmes: A Neurologist of World Repute" *Times* (London), 30 December 1965, p. 10.

³¹ Abbott, *The System of the Professions*, pp. 59-62. Stefan Timmermans, Geoffrey C. Bowker, and Susan Leigh Star, "The Architecture of Difference" in *Differences in Medicine*, pp. 220-222.

³² Abbott, noting this feature generally in professions, writes: "Today...when the vast majority of professionals are in organizational practice, and indeed when only about 50 percent of even doctors and lawyers are in independent practice, the public continues to think of professional life in terms of solo, independent practice. Similarly, the ideas that lawyers spend large amounts of time in court, or doctors in hospitals, or that architects spend most of their time actually designing buildings persist long after the realities they imply disappeared. To some extent, of course, this archaism is self-consciously maintained since it provides the older professions with a legitimating link to a romanticized past." *System of the Professions*, p. 61. Taking Abbott's comments further, without endorsing the hierarchical view implicit in the conception of invented traditions, it is possible to see this romanticized past as the place in de Certeau's

established figures in the field intentionally and unintentionally produced and reproduced. Moreover, it was one consciously and unselfconsciously cultivated and organised by students of neurology seeking to emulate their teachers. Thus, efforts advocating the formation of what Andrew Abbott called a professional ‘jurisdiction’ would have suggested that these practitioners had limitations, and furthermore have asserted intellectual limitations in a subject that was supposed (and taught) to have resisted such restriction since antiquity.

In 1880, the term neurologist, rarely used, was a label that might be pinned upon any physician – just like other descriptors such as scientist, musician, writer, or teacher. The physician of nervous diseases saw little distinction between mental and nervous diseases. Central to the practice of these physicians, was a belief in the unity of medicine, and therefore the necessity of a broad practical outlook. The physician of nervous diseases before the First World War could not be a specialist; he or she was a general physician of wide learning and knowledge. The scientific neurologist before the First World War, though sometimes medically qualified, might just as easily be described now as a physiologist, anatomist, or pathologist.³³ If anything made the scientific study of the nervous system distinctly ‘neurologic’, then it was a general interest in the nervous system. On this view, the physiologist Charles Sherrington was as much a neurologist as the clinician Samuel Alexander Kinnier Wilson. Retrospectively, the vagaries of this

phrase of ‘creative invention’, a location that gives the producers of this past the tremendous power to re-script the past in such a way that the past leads to new possibility. Slavoj Žižek, “Master Class on Jacques Lacan: A Lateral Introduction” (lecture 5, Birkbeck Institute for the Humanities, 25th May 2006)

³³ This was a view that was reproduced. Remember that in 1945, the neurologist was to be a consultant not a specialist. “Neurological Training of the Future” *BMJ* (1945), p. 292.

definition allowed almost any one to be included within the sphere of neurological practice; likewise, it permitted rather arbitrary reasons for excluding individuals as well. What was key about this characterization was that it allowed for a personal self-fashioning that placed greater emphasis on individual autonomy, achievement, and self-determination. Contemporaries perceived knowledge ‘pioneers’ as makers of their own destinies – inexhaustible and able to create knowledge through their own intellectual capacity. The belief in these qualities was reproduced in subsequent generations of neurologists. Indeed, it was one of several social dispositions underlying the habits of the emergent field. Another disposition, no less important, was continual adherence to the view that general medicine and neurology were inseparable. Thus for each new generation of students, neurology’s definition remained broad in the occupational sense and was perceived as being delimited only by individual ability. Thus, to be described a neurologist was to be recognised for producing and reproducing the dispositions of a particular scholarly habitus, which, though truly unique to the twentieth century, was depicted in a positivist tradition as allegedly commonplace among scholars in all historical periods.³⁴ That habitus was not supposed to be historically contingent in any appreciable way.³⁵

³⁴ For a similar argument, see Gadi Algazi, “Food for Thought: Hieronymus Wolf Grapples with the Scholarly Habitus” in ed. Rudolf Dekker, *Egodocuments and History: Autobiographical Writings in its Social Context since the Middle Ages* (Hilversum: Verloren, 2002), pp. 21-25. See also how Steven Shapin and Christopher Lawrence contest this positivist tradition, “Introduction: The Body of Knowledge” in *Science Incarnate*, pp. 13-16.

³⁵ “The Realm of Neurology” *JNP* Vol. 1 No. 1, (1920), pp. 67-69, 68.

These were continuities shared in all three neurological societies in the period between 1880 and 1960, but they were ones regularly challenged by external circumstances beyond the control of the emergent community. The Neurological Society of the United Kingdom, which derived from several contexts including the emergence of medical specialties like ophthalmology and a nineteenth century legacy of psychiatric practices, was founded upon broad and general principles. It never adopted a vision of itself as a specialist society per se, but rather was embedded in a generalist medical culture and operated as a society comprised of medical generalists, concerned only with establishing the clinical and scientific principles governing the nervous system.

Nevertheless, with the emergence of numerous specialties at the turn of the century, British medical elites in London – many were members of the Neurological Society – found themselves dissatisfied with medicine's fragmenting structure. Arguing that excessive specialization should be curtailed, they formed the Royal Society of Medicine in 1907 to defend the unity of medicine. Members of the Neurological Society of the United Kingdom favoured this defence of general medical practice. They voted to dissolve their society and become the Neurological Section of the Royal Society of Medicine.

In practice the meetings of the Neurological Section between 1907 and 1914 were little different from its predecessor. Moreover, there was little effort to move the Section's membership towards a new ethos of specialized practice. Rather the habits of the Section's members mirrored those of the Royal Society of Medicine more generally.

They were not inclined towards specialist practice and like many Edwardian physicians typically held prejudices against such practice. Although members of the Neurological Section were interested in the science and clinical study of the nervous system, most were no less interested in general medicine. Indeed, some of the Section's more illustrious members were Presidents of various sections of the Royal Society of Medicine. Few saw the need for special neurological departments in hospitals of medical schools, and most viewed the development of such departments as impractical and ill-conceived: what mattered was that medical students develop a wide view of clinical practice. For those few students who would pursue further training in nervous diseases at one of the three specialist nerve hospitals, they understood that their careers would invariably lead them to a consultant's position in one of the larger London or provincial hospitals.³⁶ There, though they might see patients with nervous and mental diseases, it was likely they would be treating patients with other medical conditions as well.

For a time the disposition favouring generalist medical practice prevailed in twentieth century Britain. Furthermore, this general disposition aligned with a perception of the nervous system as a broad, all-encompassing object of study. However, the First World War prompted several important social transformations in medicine. Among these were changes in practitioner self-perception matching a new social and political order promoting and constituting (and in some cases demanding) the rationalisation of medical practice. The effects, though not immediate, were palpable in many arenas, including neurology. Whereas before the War consultant general physicians were the norm in

³⁶ This had been the case for their instructors, teachers, advisers, and mentors.

British hospitals and private practice, the early 1920s saw the rapid creation of many specialist departments, including departments of nervous diseases and neurology. Lectureships in the subject were created as well, and a host of outpatient neurology clinics were also formed. Funds from the State and also philanthropy suffused through the field in unprecedented fashion, introducing new institutions and funding older ones, which assumed new rational structures. Early on in the interwar period, younger members of the Section of Neurology, most fresh from their military medical service, became self-described neurologists, while some older members adopted iconoclastic roles and called for reforms in the political and social structure of the field. Both groups in the interwar period began to be more restricted in their practice: the patients they treated increasingly suffered from organic conditions and clinical neurological research tended to focus less on functional conditions and more on biological and physiological studies of the nervous system. Although most practitioners continued to laud the ideals of general practice, the practices of neurology were moving in the opposite, specialist direction. Nevertheless, though special neurologic practice was becoming normative in ways never before seen in Britain, neurology retained atavistic features. Its practices even in the late 1930s embraced a continuous self-perception. Neurology, broad and unlimited, required at once the profoundest understanding of the clinical examination as well as the ability to integrate separate spheres of knowledge together in ways that no other group of medical workers could.

It is clear from many of their pronouncements to various audiences – public, legal, and professional – that British neurology's leadership in the 1950s believed they required no

professional jurisdictions *per se*, in so far as the nervous system was concerned. However, this very lack of jurisdiction, or the construction of a jurisdiction claiming all aspects of the nervous system to fit within its remit, made neurology impossibly difficult to administrate effectively. How institutions like the Ministry of Health or the MRC could, for example, administrate a field that claimed work and knowledge of all fields so long as they pertained in some way to the nervous system is difficult to see. Institutions like these, as well as hospitals and universities, had to create formal barriers or classifiers to distinguish the work of the neurologist from other medical professionals, especially since various closely aligned occupational groups such as general physicians, psychiatrists, and neurosurgeons claimed neurological territory as well. For practical administrative purposes, neurology became increasingly restricted to biological and physiological idioms in its research. At the level of pedagogy, understanding of clinical-pathology, rigorous clinical examination, and understanding of scientific research methods, remained the hallmarks of neurological training. However, increasingly interest in cognitive aspects of the nervous system, embodied in the work of psychology, psychopathology, or psychiatry, became restricted to those fields alone (although limited training and discussions on these subjects continued in neurology).³⁷ Thus, the perception of crisis or decline in neurology in the 1950s and early 1960s came about through the startling realisation that various other agents were externally defining neurology's practices. These agents included the State, other medical specialties and scientific

³⁷ In part the movement of clinical neurology away from functional subjects, may serve as an explanation for why in the early 1970s clinical neurology and neuroscience returned to (and in some sense re-invented) memory via bio-mechanistic synaptic explanations, epitomised, for example, by hypothesis like long term potentiation (LTP) and long term depression (LTD) of cerebral neurons.

disciplines, and hospital and university administrators. Consequently these agents, intentionally and unintentionally, introduced limitations into a field that was perceived by its leaders (and practitioners) to be justly and rightly unrestricted in its focus. In this sense all of the benefits of the rationalisation of medicine, the funding of research, and the growth of workers in neurology that had accompanied the emergence of neurology, were tempered by another reality of modern life. Accompanying rationalisation and the benefits of bureaucratisation and professionalisation, was a diminution in a particular form of self-determination and agency. Neurology, to some, was beginning to look like it might just be another, ordinary job.³⁸

Was this to become the status of neurology? For older neurologists in the 1950s, the question was not rhetorical. They, unlike younger workers in the field, remembered a time when things seemed different in medicine. Nor was this mere nostalgia for a lost world or imagined past: it was a profound recognition that rationalisation had resulted in both new forms of autonomy and the loss of older forms. Neurologists, in accepting certain institutional, political, and practical definitions for the advantages accompanying occupational recognition, had relinquished an agency created by ambiguity. The British neurologist was now an individual training in worldly institutions; his or her practices could not be regarded as being different in any way from other professionals. Other parties now dictated the rules and logics of neurology's practice as well, and would increasingly do so throughout the remainder of the twentieth century. In the 1950s and early 1960s, some older neurologists were wondering if they had accidentally killed the

³⁸ For this critique of expertise, bureaucratisation, and professionalisation see the final comments in: Steven Shapin and Christopher Lawrence, "Introduction: The Body of Knowledge" in *Science Incarnate*, p. 15.

goose that had laid their greatest intellectual eggs. As the number of practitioners in neurology increased in the 1960s and 1970s, many elites continued to see the field as being in a state of perpetual crisis. Even in 1970, the Regius Professor of Medicine at Oxford, Richard Doll (1912-2005), could only voice his sympathies with the then Oxford Professor of Neurology's struggles to fund his department. Both thought the struggle symptomatic of neurology's national crisis.³⁹

If many of the same dispositions were produced and reproduced in each generation of nerve practitioners, each generation nevertheless accommodated and encountered an increasingly different world throughout the twentieth century. By 1960, neurology had reached something of a political and social equilibrium. It had become a practitioner space defined by two competing idioms. Neurology, even as it had emerged as a politically autonomous and social recognised field with its own rules of practice, had become forcefully delimited by agendas and competing rules of others' modes of operation. Those alternative operations, themselves practices, produced and reproduced dispositions marking and appointing success in ways genuinely different from those neurologists hoped and strove to reproduce. In large part, neurology today is a synthesis of that dispute between forms of practice.

No one would be so naïve as to believe that the production and reproduction of practices and their dispositions manifests in a one-to-one correspondence with the past.

³⁹ See correspondence in WL, PP/DOL/A/1/22 Sir Richard Doll Collection.

Nonetheless, the modes of operation by which each generation seeks to produce and reproduce those dispositions and their practices can be brutally evident in historical records. Thus, it seems fitting to end with an anecdote recorded by the neurologist, Lord Walton:

Larger than life, at least in personality and flow of language, was Sir Francis Walshe, who...was not a good clinical neurologist.... He often gave a clinical demonstration on Saturday morning in the lecture theatre of Queen Square, but, unlike most of his colleagues, did not trouble to see any of the patients being demonstrated before hand. Once when with consummate showmanship, he discussed the history and carried out a relatively superficial examination on a patient and concluded that the individual was suffering from proximal myopathy, the young Australian registrar was so shocked by the inaccurate diagnosis that, as the patient lay on the trolley waiting to be wheeled out of the room, he walked past the recumbent patient's protruding feet and gently stroked each sole, eliciting clear-cut bilateral extensor plantar responses. That evidence of bilateral pyramidal tract disease, clearly invalidating Walshe's diagnosis, did not pass unnoticed by the great man who turned to the Australian in question and said... 'A young man with his eye on the future would never have done that.'⁴⁰

London, 2006

⁴⁰ Walton, *Spice of Life*, pp. 164-165.

Appendices

Underlying this dissertation is an extensive prosopographic analysis. Prosopography, a quantitative methodology, has been typically understood as an uncritical analysis examining the biographical characteristics of a community in historical context, usually ‘great men’.¹ In the 1970s, however, scholars sought to refine the methodology by establishing ‘links between action and context’. They suggested that ‘collective biography’ should move beyond its typical focus on social or political elites to critically examine group dynamics.² This effort was made in order to discover important social characteristics believed normally hidden from the historian or sociologist’s view.

This was certainly an ideal strategy, but its feasibility remains debatable. Though the criticisms now lodged against prosopography are often misrepresentative, one is very reasonable. The sources used in prosopography (and quantitative approaches generally) are often so context-laden that they are impossible to weave logically together.³ Moreover, these analyses suffer from an entirely different problem as well. Their authors have a propensity for a vague intuitionism, which often becomes integral to their story. This occurs not only in the modes of analysis, but indeed in the act of constructing the data for analysis. Hidden categories, often anachronistic, become fixed and embedded within the data. Thus, the results, though they appear certain and concrete, are abstract renderings of incomplete information that tell us little about less. Often the sheer effort of making a prosopography becomes the bandage for its many limitations – by no means a reason for accepting it for what the author says it is.

Given these limitations, why does this prosopography appear here? There are many reasons. Firstly, much of the information available here is not readily accessible. In addition, parts of the work involved in this analysis have influenced my thinking throughout the course of this project, and created other questions that I answered using archival sources. Finally, the information appearing in the primary source analysis (Appendix C) provides several approximate snapshots that I feel are generally representative of the individuals appearing throughout the latter chapters (4, 5, 6, and 7) of this dissertation.

¹ Lewis Pyenson, “‘Who the Guy’s Were’: Prosopography in the History of Science’ *History of Science* Vol. XV (1977), pp. 155-188; G S Rousseau, ‘The Torpedo-Act’: Prosopography as Biography’ [Essay Review] *Annals of Science* Vol. 42 (1985): pp. 431-435. James K McConica, ‘The Prosopography of the Tudor University’ *Journal of Interdisciplinary History* Vol. 3 (1973), pp. 543-554.

² Steven Shapin and Arnold Thackray, ‘Prosopography as a Research Tool in History of Science: The British Scientific Community, 1700-1900’ *History of Science* Vol. XII (1974), p. 3. Also see: David Allen, ‘Arcana ex multitudine: Prosopography as a Research Technique’ *Archives of Natural History* Vol. 17 (1990), pp. 349-359.

³ The scathing article by T F Carney ‘Prosopography: Payoffs and Pitfalls’ *Phoenix* Vol. 27 (1973), pp 159-179 is not to be missed.

This dissertation has argued that neurological practices emerged between 1880 and 1960. One of the difficulties this argument created was source selection. The information appearing in Appendices A-C describes the group of individuals I eventually chose for my analysis, though I concentrated particularly on the group appearing in Appendix C as the one most clearly associated with the ‘defining’ of neurology.

Appendix A offers supplementary evidence for themes explored in Chapters 2, 3, and 4. The theme of those chapters was that a culture of generalist practice transformed into a culture of specialist practice. But what did that general medical culture look like? Though the information provided below is limited in its focus, the lists and charts in Appendix A nevertheless suggest an interactive and integrated world. Moreover, the elite political positions held by many in this group suggest broader commonalities with medical practitioners as a whole. The information in Appendix A also underscores the diverse medical and scientific interests held by members of the Neurological Society of the United Kingdom.

If Appendix A offers observations about general culture, then what sources are available (and how can they be selected) for offering observations about specialist culture? The question was one of the most challenging in this dissertation. Many primary documents indicated ‘unhappiness’ with the Neurological Section of the Royal Society of Medicine’s inclusiveness. Individuals formed the Association of British Neurologists (ABN) partially out of discontent with the Section’s proceedings, policy, and lack of autonomy from the Royal Society of Medicine. These points were addressed in the narratives of Chapters 4, 5, 6, and 7. Yet, as Chapter 7 described, no list from the early years of the ABN exists. Appendix B reveals the methodology I used to select a list of individuals most clearly implicated in the ‘defining’ of neurology and forming the membership of the ABN. The list appearing in Appendix C is the result of those efforts.

Appendix C is a descriptive analysis of primary sources on individuals involved in ‘defining’ neurology. The information provided there should not be taken as definitive. The sources used here were various, and included: obituaries and other short biographical abstracts, entries in *Who was Who*, curricula vitae, short employment records, biographies, and autobiographies. Most of these provided incomplete information at best, were context oriented, and not necessarily logically comparable. However, rather than using this data to create a concrete narrative, I used it to give some basis to my intuition and knowledge about this community. Thus, though Appendix C gives an impression of a contingent and not homogeneous community and does not provide definitive information, I think it still suggests interesting points that arose in the dissertation. The sense of this community’s educational and social background, its professional achievements, as well as its marginality provided a semi-platform from which some of my investigations were launched. A more definitive study, however, would require more precise primary sources, such as employment records, probate records, census data, school files, and tax returns.

Appendix D is unrelated to the others. It provides supplementary information for Chapter 6. Finally, Appendix E is included because it is the only existing bibliography for the Section of Neurology of the Royal Society of Medicine.

Appendix A – British Neurology and the Neurological Society of the United Kingdom

The following lists are difficult to locate. Membership lists for the Neurological Society, the Ophthalmological Society, and the Royal Medico-Psychological Association can be found in those societies transactions. Membership lists for the Association of Physicians and the Physiological Society are located in those societies archives. The Royal Society has an on-line archive, and I cross-referenced all of the members of the Neurological Society within that source. Common membership was checked using an Access Database of Names from each society. The List of Brain's Guarantors is available only in the RSM Archives.

List A1

Members of the Neurological Society of the United Kingdom

Abrahams, Betram	Caley, H A
Anderson, H Kerr	Cambell, Harry
Andriezen, W Lloyd	Campbell, A W
Armour, D J	Chambers, James
Ascherson, W Lawrence	Clarke, J Michell
Ballance, C A	Clouston, T S
Barlow, Thomas	Cole, Robert Henry
Barnes, A Stanley	Cole, Sydney John
Barratt, J O Wakelin	Collier, James S
Bastian, H Charlton	Colman, W S
Batten, Frederick E	Corner, Harry
Bayliss, W M	Coupland, Sidney
Beach, Fletcher	Cox, Joshua John
Beddard, A P	Craig, Maurice
Beevor, C E	Crichton-Brown, J
Bennett, A Hughes	Darley-Hartley, W
Berry, George	Davidson, Andrew
Bolton, Joseph Shaw	Dawson, William R
Bond, C Hubert	Depuy, Eugene
Bond, J W	Dodd, Henry Work
Bowlby, Anthony A	Dreshfeld, Julius
Boyce, Rubert W	Drummond, David
Bradford, J R	Dugeon, L S
Bramwell, Byrom	Fawcett, John
Bramwell, Edwin	Ferrier, David
Bramwell, John Milne	Flashman, J F
Bristowe, Hubert Carpenter	Fleming, Robert
Bristowe, J S	Fletcher, Herbert Morley
Broadbent, William	Galton, Francis
Brodie, T Grigor	Gaskell, Walter H
Brown, H H	Gibson, G A
Brown, Sanger	Giglioli, Guiolo
Bruce, Alexander	Godlee, Rickman J
Bruce, J Mitchell	Goldschmidt, Oscar Bernard
Brunton, T Lauder	Goodall, Edwin
Bryant, John Henry	Gossage, Alfred Milne
Bubb, William	Gotch, Francis
Bucknill, John	Grant, J Dundas
Bury, Judson Sykes	Gunn, R Marcus
Buzzard, Edward Farquhar	Guthrie, Leonard
Buzzard, Thomas	Hall, W Hamilton
Byran, Frederick	Halliburton, William Dobinson

Hamilton, D J	Mann, J Dixon
Hanbury, William R	Mantle, Alfred
Harris, David F	Marris, W A
Harris, Wilfred J	Martin, Sidney
Haslett, John Hanfield	May, W Page
Hawkins, Herbert Pennell	McAldowie, Alexander
Haycraft, J B	McDougall, William
Head, Henry	Menzies, William Francis
Hill, Alexander	Mercier, C
Hobhouse, Edmund	Meyer, Adolf
Holmes, Gordon Morgan	Mickle, W Julius
Horsley, Victor	Miller, William
Howland, Goldwin W	Milne, Roberts Chas John
Huggard, William	Moore, Norman
Hulme, Goerge Frederick	Morris, Malcolm
Humphreys, F R	Morrison, C S
Humphry, Laurence	Mott, F W
Hunter, Walter K	Mould, George William
Hunter, William	Murray, George
Hutchinson, Jonathan	Murray, H Montague
Hyslop, T B	Myers, Charles S
Jackson, John Hughlings	Neild, Newman
Jessop, W H	Nettleship, Edward
Johnston, George	Newington, Hayes
Jones, A E	Nicolson, David
Jones, Henry Lewis	Niermeyer, J H H
Jones, Robert	Nolan, M J
Kelynack, T N	Norman, Conolly
Kidd, Percy	Ogilvie, George
Langdon, F W	Oliver, Thomas
Langdon-Down, Reginald L	Orange, William
Langley, J N	Ormerod, J A
Lawford, J B	Orr, David
Lees, D B	Owen, Arthur Geoffrey
Lewis, H Wolseley	Page, Herbert William
Lindsay, J A	Palmer, Frederick S
Loewenthal, Max	Parkinson, John Herbert
Lord, John R	Parsons, John Herbert
MacCormac, John M'Gee	Passmore, E S
MacDonald, Peter William	Paton, Leslie
Macguire, Robert	Patterson, Donald Rose
Mackenzie, James	Piper, Francis P
Mackenzie, Stephen	Pitt, G N
Mackintosh, Ashley W	Purves Stewart, James
Macnamar, E D	Rambaut, Daniel F
Maguire, Robert	Ransom, William B

Rayner, Henry
 Reid, E W
 Reissmann, Charles
 Rennie, George E
 Reynolds, Ernest
 Risien Russell, J S
 Rivers, W H R
 Robertson, William Ford
 Romanes, G J
 Rowe, Edmund Lewis
 Rows, R G
 Ruffer, Marc Armand
 Russell, A E
 Russell, J S Risien
 Russell, J W
 Salaman, Redcliffe
 Sanderson, J Burdon
 Savage, George H
 Savill, T D
 Schafer, E A
 Schorstein, Gustave
 Semon, Felix
 Seward, William Joseph
 Shafer, E A
 Sharkey, Semour J
 Sherrington, C S
 Shuttleworth, George
 Singer, H D
 Smith, F J
 Smith, Percy
 Spicer, W T Holmes
 Stafford, William
 Stanley, Douglas
 Stansfield, Thomas E
 Starling, Earnest Henry
 Steell, Graham
 Stewart, T Grainger
 Stirling, William
 Stoddart, William H
 Stone, W G
 Sullivan, William Charles

Sutherland, George Alexander
 Syers, Henry W
 Taylor, James
 Thomson, H Campbell
 Thorburn William
 Titchener, E B
 Tooth, H H
 Trevelyan, E F
 Tuckey, Charles Lloyd
 Tuke, D Hack
 Tuke, J Batty
 Tuke, Thomas Seymour
 Turner, William Aldren
 Turney, Horace
 Tweedy, John
 Vincent, Swale
 Voorthus, J A
 Waller, Augustus
 Warner, Francis
 Warrington, W B
 Watson, Chalmers
 Wattesville, A de
 Weber, F Parkes
 West, Samuel
 White, Ernest W
 White, W Hale
 Whiting, Arthur J
 Wigglesworth, Joseph
 Wilkin, G C
 Wilkin, Griffith Charles
 Wilks, Samuel
 Williams, Leonard
 Williamson, Richard
 Wilson, Albert
 Wilson, G R
 Wilson, S A K
 Wood, Guy
 Wood, T Outtersen
 Woodhead, G Sims
 Wright, Hamilton
 Young, Robert Arthur

List A2

Guarantors of *Brain – a Journal of Neurology*, 1907

Balance, C A	Langdon, F W
Barlow, Thomas	Macdonald, Peter William
Bastian, H Charlton	Mackintosh, Ashley W
Bayliss, W M	May, W Page
Beevor, C E	Murray, George R
Bramwell, Byrom	Norman, Conolly
Bramwell, Edwin	Page, Herbert William
Brown, Sanger	Ransome, William B
Bruce, Alex	Reissmann, Charles H
Buzzard, E Farquhar	Robertson-Milne, Chas. John
Buzzard, Thomas	Rows, R G
Cambers, James	Ruffer, Marc Armand
Campbell, A W	Russell, J W
Clarke, J Michell	Savage, G H
Collier, James S	Savill, T D
Colman, W S	Sharkey, S J
Craig Maurice	Sherrington, C S
Davidson, Andrew	Smith, R Percy
Depuy, Eugene	Stewart, Purves
Ferrier, David	Stewart, T Grainger
Fletcher, H Morely	Stoddart, William H
Gunn, R Marcus	Taylor, James
Hobhouse, Edmund	Tooth, H H
Holmes, Gordon M	Turner, William Aldren
Horsley, Victor	Turney, Horace G
Huggard, William	Waller, Augustus
Jackson, J Hughlings	Warrington, W B
Jones, Henry Lewis	White, W Hale
Kidd, Percy	Whiting, Arthur J

List A3

Editors of *Brain – a Journal of Neurology*

Crichton-Browne, James	1879-1901
Bucknill, John	1879-1901
Ferrier, David	1879-1901
Hughlings Jackson, John	1879-1901
Watteville, Armand de	1884-1901
Percy Smith, Robert	1901-1905
Head, Henry	1905-1923
Gordon, Holmes	1923-1938
Walshe, Francis	1938-1954
Brain, W Russell	1954-1967
Williams, Denis	1967-1975
Philips, Charles	1975-1982
Thomas, Peter	1982-1991

List A4

Hughlings Jackson Lecturers

Hughlings Jackson, John	1897
Hitzig, Eduard	1900
Broadbent, William	1903
Horsley, Victor	1906
Head, Henry	1920
Dana, Charles	1927
Sherrington, Charles	1931
Foerster, Otfried	1935
Holmes, Gordon	1938
Adrian, Edgar D	1946
Greenfield, James Godwin	1949
Walshe, Francis	1952
Jefferson, Geoffrey	1955
Symonds, Charles	1959
Brain, W Russell	1961
Critchley, Macdonald	1964

List A5

Common Membership between the Neurological Society of the United Kingdom and the Royal Society

Anderson, Hugh Kerr	Langley, John Newport
Allbutt, Thomas Clifford	Mackenzie, James
Bastian, H Charlton	Martin, Sidney Harris Cox
Bayliss, William Maddock	McDougall, William
Boyce, Rubert William	Mott, Frederick Walker
Bradford, John Rose	Myers, Charles Samuel
Broadbent, William Henry	Nettleship, Edward
Brodie, Thomas Gregor	Parsons, John Herbert
Brunton, Thomas Lauder	Ransom, William Henry
Bucknill, John Charles	Reid, Edward Waymouth
Burdon-Sanderson, John Scott	Rivers, William Halse Rivers
Ferrier, David	Romanes, George John
Gaskell, Walter Holbrook	Salaman, Redcliffe Nathan
Gotch, Francis	Sharpey-Schafer, Sir; Edward Albert
Gowers, William Richard	Sherrington, Charles Scott
Gull, William Withey	Smith, Frederick John
Halliburton, William Dobinson	Starling, Ernest Henry
Hamilton, David James	Barlow, Thomas
Head, Henry	Turner, Sir; William
Horsley, Victor Alexander Haden	Waller, Augustus D
Hutchinson, Jonathan	Wilks, Sir; Samuel
Jackson, John Hughlings	

List A6

Common Membership between the Neurological Society of the United Kingdom and the Physiological Society of the United Kingdom

Anderson, H Kerr	Jackson, J Hughlings
Ballance, C A	Langley, J N
Barratt, J O Wakelin	May, W Page
Batten, Frederick E	Mott, F W
Bayliss, W M	Myers, Charles S
Beddard, A P	Oliver, Thomas
Beevor, C E	Parsons, John Herbert
Boyce, Rubert W	Reid, E W
Bradford, J R	Rivers, W H R
Brodie, T Grigor	Russell, A E
Bruce, Alex	Salaman, Redcliffe
Brunton, T Lauder	Sanderson, John Burdon
Clarke, J Mitchell	Schafer, E A
Dean, H	Sherrington, C S
Ferrier, David	Smith, F J
Fletcher, Morley	Stafford, William
Gaskell, W H	Starling, Earnest Henry
Gotch, Francis	Tooth, H H
Hall, W Hamilton	Tuke, J Batty
Halliburton, William Dobinson	Vincent, Swale
Hamilton, D J	Waller, Augustus
Harris, David	Warrington, W B
Haycraft, J B	White, W Hale
Head, Henry	Whiting, Arthur J
Hill, A Croft	Woodhead, G Sims
Horsley, Victor	Young, Robert Arthur
Hunter, William	

List A7

Common Membership between the Neurological Society of the United Kingdom and the Ophthalmological Society of the United Kingdom

Barlow, Thomas	Lawford, J B
Batten, Fred E	Mott, F W
Beevor, C E	Nettleship, Edward
Berry, G A	Page, Herbert William
Bristowe, Hubert Carpenter	Parker, Herbert George
Broadbent, William	Parsons, John Herbert
Browne, James	Paton, Leslie
Buzzard, Edward F	Rivers, W H R
Buzzard, Thomas	Russell, J S Risien
Dodd, Henry Work	Savage, George H
Ferrier, David	Schorstein, Gustave
Fisher, J Herbert	Sharkey, Seymour J
Gunn, R Marcus	Spicer, Wm T Holmes
Guthrie, Leonard	Taylor, James
Hutchinson, Jonathan	Thompson, Arthur H
Jackson, John Hughlings	Tooth, Howard H
Jessop, W H	Turner, William Aldren
Johnston, George	Woodhead, G Sims
Jones, A E	

List A8

Common Membership between the Neurological Society of the United Kingdom and the Royal Medico-Psychological Association

Anderson, H Kerr	Mott, F W
Andriezen, W Lloyd	Mould, George William
Beach, Fletcher	Newington, Hayes
Bolton, Joseph Shaw	Nicolson, David
Bond, Charles Hubert	Nolan, Michael
Bramwell, John Milne	Norman, Conolly
Bristowe, Hubert Carpenter	Orange, W
Bubb, William	Orr, David
Buckmill, J C	Pasmore, Edwin Stephen
Chambers, James	Piper, Francis Parris
Clouston, T S	Rambaut, Daniel F
Cole, Robert Henry	Rayner, Henry
Cole, Sydney John	Reid, William
Corner, Harry	Rivers, William H R
Craig, Maurice	Robertson, William Ford
Crichton-Browne, J A	Rowe, Edmund Lewis
Davidson, Andrew	Rows, Richard Gundry
Dawson, William R	Savage, George H
Goldschmidt, Oscar Bernard	Savill, Thomas D
Goodall, Edwin	Seward, William Joseph
Hack Tuke, D	Shuttleworth, George
Hanbury, William Reader	Smith, R Percy
Hyslop, Theo B	Stansfield, Thomas E
Jackson, J Hughlings	Stoddart, William Henry Butter
Jones, Robert	Sullivan, William Charles
Jones, William Edward	Thomson, Herbert Campbell
Lewis, H Wolseley	Trevelyan, Edmund Fauriel
Lord, John R	Tuke, John Batty
Macnamara, Eric Danvers	White, Ernest William
Menzies, William Francis	Wiglesworth, Joseph
Mercier, Charles A	Wilson, Albert
Mickle, William Julius	Wood, Guy Mills
Morrison, Cuthbert S	Wood, T Outtersen

List A9

Common Membership between the Neurological Society of the United Kingdom (dissolved 1906) and the Association of Physicians of Great Britain and Ireland (founded in 1907)

Barlow, Thomas	Lindsay, J A
Barnes, A Stanley	Mackenzie, James
Beddard, A P	Macnamara, E D
Bradford, J Rose	Mann, J Dixon
Bramwell, Byrom	Moore, Norman
Bramwell, Edwin	Mott, F W
Bruce, Alex	Murray, George
Brunton, Lauder	Neild, Newman
Buckmill, J C	Palmer, Frederick T
Bury, Judson Sykes	Pitt, G Newton
Buzzard, E F	Reynolds, Ernest
Caley, H A	Ruffer, Marc Armand
Clarke, J Michell	Russell, J S Risien
Collier, James S	Russell, J W
Colman, W S	Sharkey, Semour J
Drummond, David	Smith, F J
Fawcett, John	Steell, Graham
Fleming, Robert	Sutherland, George Alexander
Fletcher, Herbert Morley	Taylor, James
Gibson, G A	Thomson, H Campbell
Goodall, Edwin	Tooth, H H
Gossage, Alfred Milne	Trevelyan, E F
Guthrie, Leonard	Turner, William Aldren
Hawkins, Herbert Pennell	Turney, Horace
Head, Henry	Warrington, W B
Hobhouse, Edmund	Watson, D Chalmers
Humphry, Laurence	Weber, F Parkes
Hunter, Walter K	West, Samuel
Hunter, William	White, W Hale
Kidd, Percy	Young, Robert Arthur
Lees, D B	

Table A1 – Membership in Medical and Scientific Societies

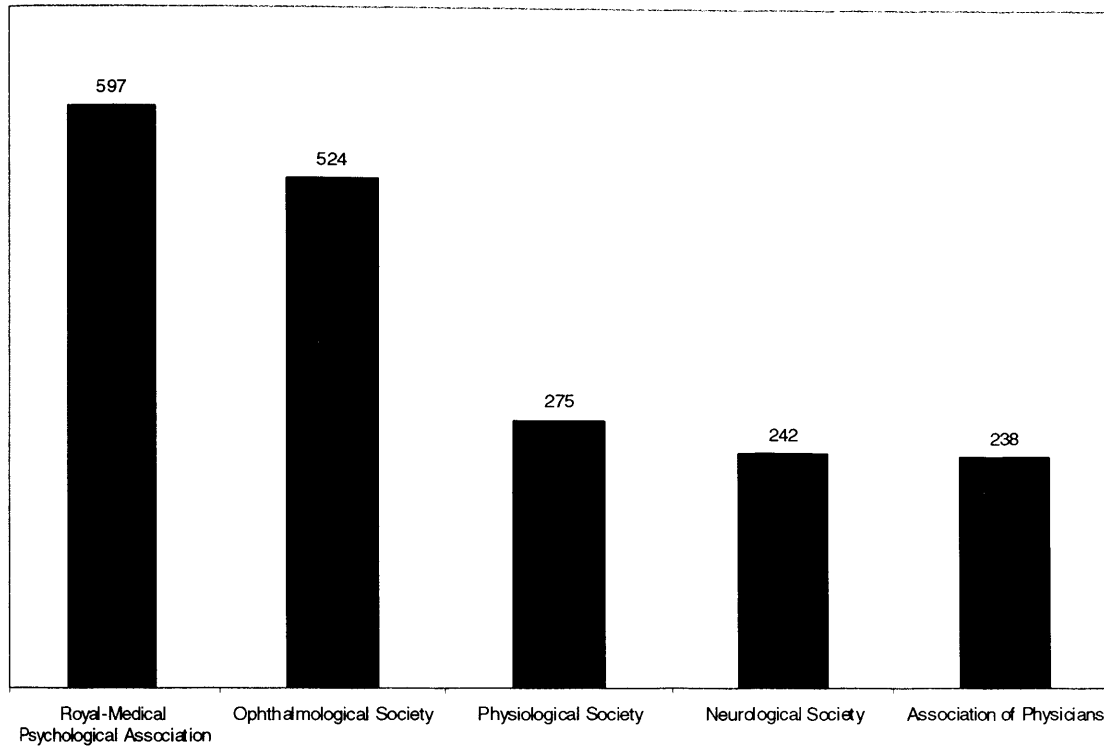


Table A1: Number of members in Medical and Scientific Societies in 1905, and the Association of Physicians in the year it was founded, 1907.

Table A2 – Common Membership with Neurological Society of the United Kingdom (n = 242)

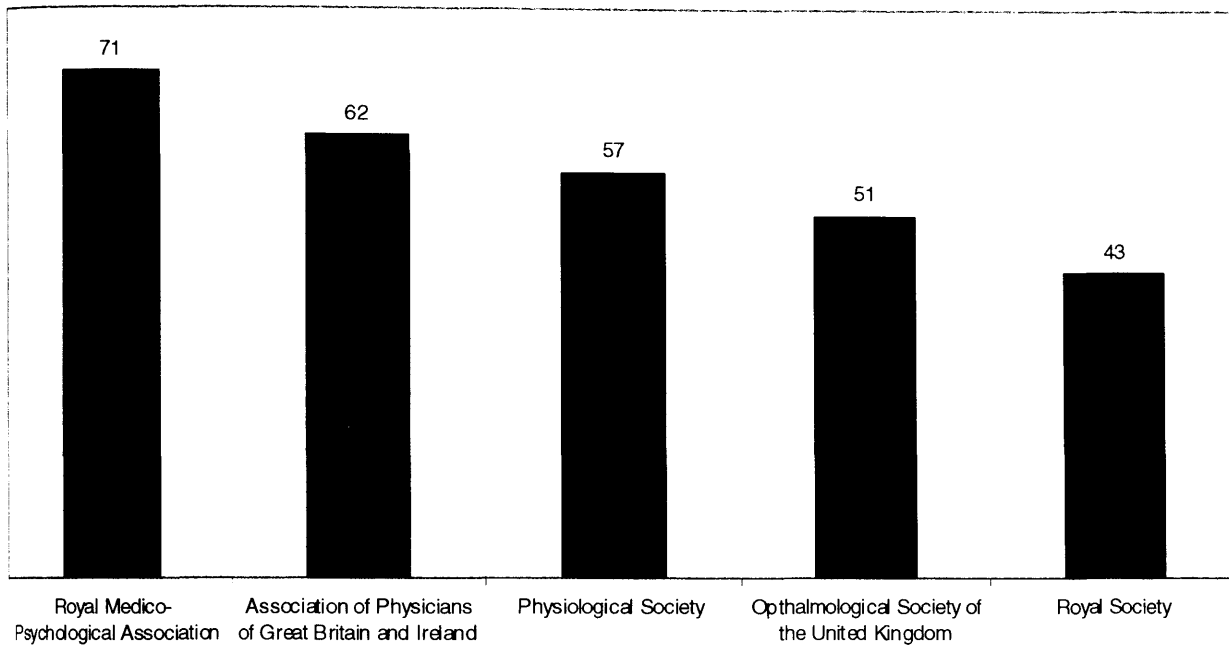


Table A2: Common membership between the Neurological Society and other contemporary medical and scientific societies. It is interesting to note that of the forty-three who were members in the Royal Society, only John Hughlings Jackson and Frederick Mott were members of the Royal Medico-Psychological Association. Mott was the only individual with membership in all six societies.

Table A3 - Common Membership (percent) with Neurological Society of the United Kingdom

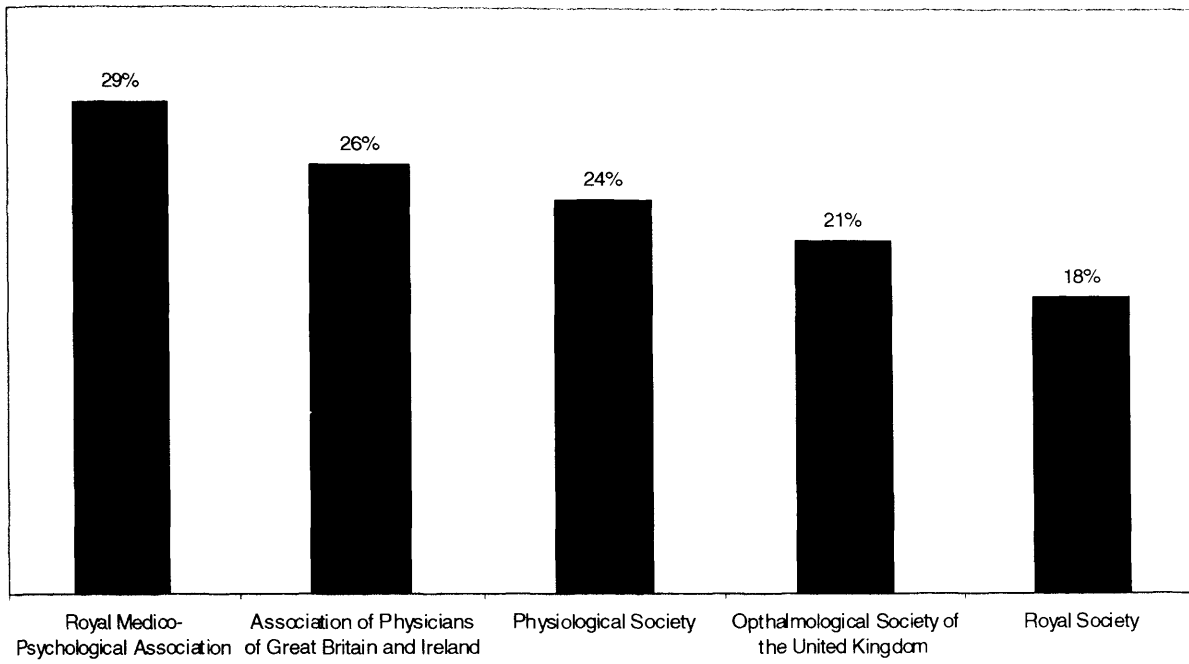


Table A4: Common membership by percent between the Neurological Society and other contemporary medical and scientific societies.

Table A4 - Common Membership in Medical and Scientific Societies

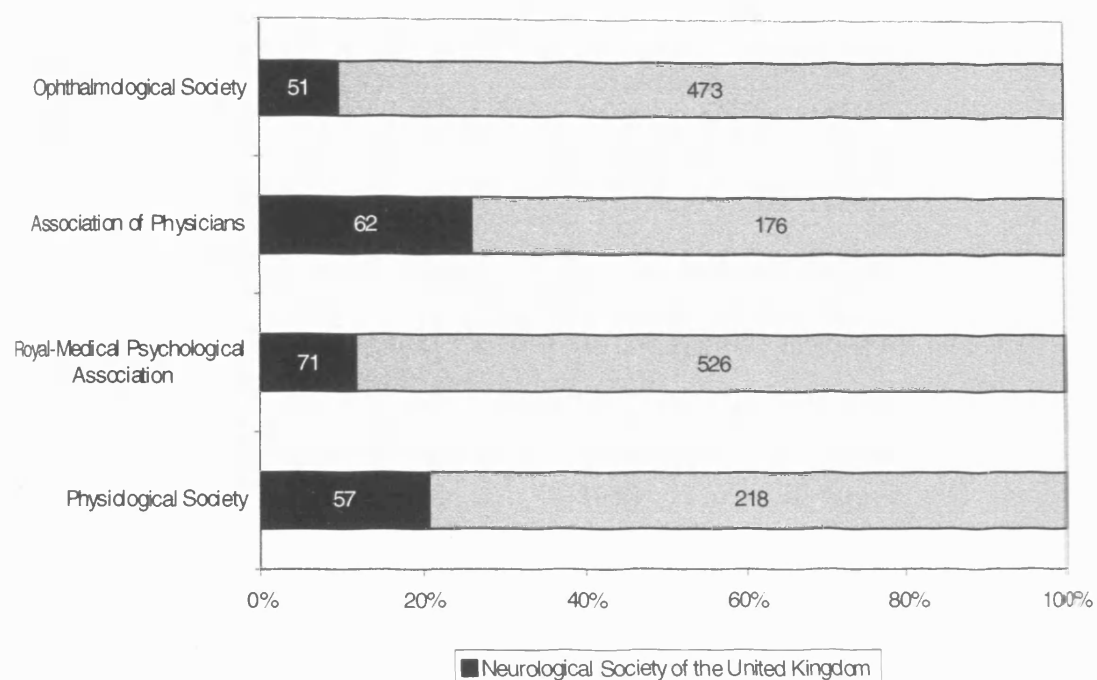


Table A4: Number of Members of the Neurological Society of the United Kingdom participating in other medical and scientific societies.

List A10

Members of the Neurological Society of the United Kingdom and also Presidents of the Royal College of Physicians, London

Wilks, Samuel	1896-1898
Barlow, Thomas	1910-1914
Normal, Moore	1918-1923
Bradford, John Rose	1926-1930
Dawson, William R	1931-1937

List A11

Members of the Neurological Society of the United Kingdom and also Presidents of the Royal College of Physicians, Edinburgh

Bramwell, Byrom	1910
Bramwell, Edwin	1933

List A12

Members of the Neurological Society of the United Kingdom and also Presidents of the Royal College of Surgeons, London

Hutchinson, Jonathan	1889
Tweedy, John	1903
Godlee, Rickman John	1911

List A13

Members of the Neurological Society of the United Kingdom and also Presidents of the Medical Society of London

Broadbent, William Henry	1881
Jackson, John Hughlings	1887
Hutchinson, Jonathan	1892
Brunton, T Lauder	1905
Balance, Charles A	1906
Bruce, J Mitchell	1911
Ferrier, David	1913
Hale White, William	1920
Dawson, William R (Lord)	1922
Armour, Donald J	1929
Young, Robert Arthur	1930

Appendix B – Membership Lists for British Neurological Societies, 1931-70

Membership lists for British neurological societies in twentieth-century Britain are difficult to locate, and *only deceased members of the Association of British Neurologists are identified in this study*. Two lists from the Royal Society of Medicine's Section of Neurology survive (1937 and 1957). No official record of members of the Association of British Neurologists (ABN) has been found for any year before 1970. Although the ABN had fifty-one original members, no known documentation identifies who they were. Using four different lists, as well as the ABN Council Minutes, I have identified 100 neurologists who were either founding members or early members of the Association (see Appendix C). The lists used for this were a published list found in the *Proceedings of the 1931 First International Neurological Congress* (List B1), the 1937 membership list from the RSM records (List B2), a list of neurologists used by the 1953 Committee of Neurology at the Royal College of Physicians (List B3), and a surviving membership roll of ABN members from 1970 (List B4). I cross-referenced these lists with the ABN Council Minutes to create a membership list for the ABN (List B4). This I believe is a close approximation of ABN members from the years 1933 through 1960.

It is noteworthy that in 1945, the ABN's membership was restricted to a maximum of 65 members. This was increased to 75 in 1950, and 100 by 1953. In 1960, membership was increased to 125. Likewise, though twenty-one women were members of the Section of Neurology and four women attended the Berne Congress, only four women were apparently elected to the ABN's membership between 1933-1960.

List B1

British Delegates to the First International Neurological Congress, Bern 1931

Adie, W J	Griffiths, G M
Adrian, E D	Holmes, Gordon
Armitage, George	Jefferson, Geoffrey
Armour, Donald	Johnson, William
Barkas, Mary	Mackintosh, Ashley W
Barnes, Stanley	Marcus, Maurice
Bramwell, Edwin	Martin, J Purdon
Brander, John	McConnell, Adams
Brasher, C W J	Nattrass, Frederick
Brown, T Graham	Nolan, M J
Buzzard, E F	Paton, Leslie
Cairns, Hugh	Purves Stewart, James
Cloake, Philip	Riddoch, George
Cohen, Henry	Rogers, Lambert
Collier, James	Russell, D S
Core, Donald	Russell, J S Risien
Critchley, Macdonald	Russell, W Ritchie
Denny-Brown, Derek	Sargent, Percy
Dott, Norman	Sherrington, Charles
Eawes, Elizabeth Cowper	Stern, Ruby
Feiling, Anthony	Symonds, C P
Ferguson, Fergus	Taylor, James
Garland, Hugh	Weber, Hilda
Gillespie, R D	Wilson, S A Kinnier
Gordon, R G	Young, J C
Greenfield, J Godwin	

List B2

Members of the Section of Neurology, Royal Society of Medicine, 1937

Adrian, Edgar Douglas	Carleton, Hugh Hadfield
Alabaster, Edward Beric	Carlill, Hildred
Alcock, Nathaniel Scott	Carmalt-Jones, Dudley William
Allen, Clifford, Edward	Carmichael, Edward Arnold
Anderson, William Kirkpatrick	Carver, Alfred Edward Arthur
Archer, Basil William Crowhurst	Cassidy, Maurice Alan
Arkwright, Joseph Arthur	Castellain, Hermengild George
Armitage, Bernard William Francis	Cawadias, Alexander
Armstrong, Charles Nathaniel	Clark, James Thomson Doran
Armstrong-Jones, Robert	Clark, Lizzie Mackay Smith
Ashby, William Ross	Cloake, Philip Cyril Powter
Baker, John Cotter	Cockayne, Edward Alfred
Bankart, John Sydney Blundell	Cohen, Henry
Barling, Benjamin	Cohn, Hans Max
Barlow, Donald Spiers	Collins, Michael Abdy
Barlow, Thomas Bart	Connell, Walter Ford
Barnes, Arthur Stanley	Cook, Leslie Colin
Beddard, Arthur Philip	Corner, Harry
Bennet, Edward Armstrong	Craig, Royal Neville
Bhatia, Sohan Lal	Crichton-Miller, Hugh
Biggam, Alexander Gordon	Critchley, Macdonald
Blandy, Marjorie Ada	Cumings, John Nathaniel
Bond, Charles Hubert	Curran, Richard Desmond
Borthwick, George Arthur	Curtis, Francis Roy
Bourne, Geoffrey	Dally, John Frederick Halls
Boyle, Alice Helen Anne	Dalzell, Alexander Charles
Brain, Walter Russell	Davies, Hugh Morriston
Bramwell, Edwin	Davies, Ivor Jones
Brander, John	Denny-Brown, Derek Ernest
Brasher, Charles William James	Dickson, William Elliot Carnegie
Brims, Donald James	Dixon, Joseph Francis
Brinton, Denis	Dobell, David Carr
Bromley, Lancelot	Douthwaite, Arthur Henry
Brown, George	Duncan, Archibald Glen
Buckley, Charles William	Dundas-Grant, James Dundas
Burke, Noel Hawley Michael	Dunkley, Edward Vincent
Burton, Hugh Leonard	Earl, Charles James Cecil
Butler, Eric Norman	Eastwood, Sibyl Renee Julia
Buzzard, Edward Farquhar	Edwards, Colin Campbell
Cairns, Hugh William Bell	Elkington, John St Clair
Campbell, Harry	Elliott, Thomas Renton
Cannon, Alexander	Eurich, Frederick William

Fawcett, John	Hobhouse, Edmund Walter Neil
Feiling, Anthony	Hoff, Ebbe Curtis
Ferguson, Fergus Robert	Holmes, Gordon
Findlay, John	Horsfall, Robert Eric
Fisher, John William	Hort, Frederick Aylmer
Fleming, Robert	Howe, Eric Graham
Fletcher, Herbert Morley	Howell, Conrad Meredyth Hinds
Forsyth, David	Hunt, John Henderson
Fouche, Carl Hercules	Hurst, Edward Weston
Fox, Joseph Tylor	Hyland, Herbert Hylton
Franklin, Marjorie Ellen	Ind, Charles Francis
Fraser, Ian Comyn	Ingleby, Helen
Garland, Hugh Gregory	Ironside, Redvers Nowell
Gaylor, John Baxter	Jackson, Harvey
Gibbens, John Hartley	Jeans, William Dampier
Gillespie, Robert Dick	Jefferson, Geoffrey
Gillespie, William Hewitt	Johnson, William
Gilmour, Richard Withers	Jones, Ernest
Gilpin, Frederick Lucien	Joyce, James Leonard
Golla, Frederick Lucien	Kelynack, Theophilus Nicholas
Goodall, Edwin	Kennard, Margaret Alice
Gordon, Ronald Grey	Kennedy, Robert Foster
Gossage, Alfred Milnes	Kholy, Mohamed Kamil el
Graham Bonnalie, Frederick Eaton	Kidd, Percy
Greenfield, Joseph Godwin	Knight, Geoffrey Cureton
Griffin, Jessie	Lanckenau, Niellie Ida
Griffiths, Gvenvron Mary	Landmead, Frederick
Guttmann, Erich	Lane, Charles Roger Tyssen
Hall, Donald George	Langdon-Down, Reginald Langdon
Hall, George	Lapage, Charles Paget
Hall, Gilbert Steward	Last, Samuel Leopold
Hall, John Falconer	Le Marquand, Horace Sharmand
Hall-White, William	Leslie, Norman Hector
Hamill, Philip	Levy, Aaron Harold
Hamilton, John Gerard	Levy, Herbert
Hampson, Arthur Cecil	Lewis, Aubrey Julian
Hardcastle, Douglas Noel	Lindsay, Edwin Algernon
Harman, Nathaniel Bishop	Llyod, John Peregrin
Harris, Henry	Lockwood, Madeline Rose
Harris, Noel Gordon	Lowson, James Prain
Harris, Wilfred	Luff, Mary Constance
Hart, Bernard	Lyle, Herbert Willoughby
Hartog, Otto	Macdonald, Frederic Gordon
Henderson, William Robert	MacKenzie, Murdo
Hill, Alfred Rowland Bekeley	Mackintosh, Ashley Watson
Hill, Thomas Rowland	Mapother, Edward

Marcus, Maurice	Rae, James Burnett
Marshall, Catherine Mary	Rambaut, Daniel Frederick
Martin, James Purdon	Rees, Thomas Percy
Matthew, David	Richardson, Dalton
Maver-Gross, Willy	Riddoch, George
Mavrogodato, Anthony	Rogers, Helen Jones
McAlpine, Douglas	Rogers, Lambert Charles
McCartan, William	Rolleston, John Davy
McConnell, Adams Andrew	Rose, Louis
McCrea, Hugh Moreland	Ross, James Paterson
McKissock, Wylie	Ross, Thomas Arthur
McMenemey, William Henry	Roth, Ernest John Harold
Mehta, Manek Merwanii	Rudolf, Gerald Richmond Anderdon de
Menzies, William Francis	Montjoie
Meyer, Alfred	Russel, Colin K
Miller, Reginald Henry	Russell, Alfred Ernest
Moll, Henry	Russell, James Samuel Risien
Monro, Thomas Arthur Howard	Russell, William Ritchie
Mould, Gilbert Edward	Rycroft, Benjamin Williams
Murray, George Redmayne	Rylander, Carl Gosta
Muskens, Louis Jacob Josef	Sands, Dalton Eric
Myers, Charles Samuel	Savin, Lewis Herbert
Natrass, Frederick John	Scoresby-Jackson, Margaret
Ness, Robert Barelav	Scott, Sydney
Newton, Robert Denis	Seagar, Edward Aitken
Nicholls, Nicolai	Selbourne, Henry Armand Hugh
Nicol, William Drew	Sewell, Sidney Valentine
Noble, Ralph Athelstand	Shapland, Cyril Dee
Nolan, Michael James	Sharp, Bryan Buckley
O'Flynn, Elizabeth	Sheldon, Joesph Harold
Oliver, Thomas	Shepley, William Hadfield
Orr, Hugh Campbell	Siegheim, Friedrich
Panton, Philip Noel	Simmonds, Bernard Sangster
Parfitt, David Neil	Simpson, Samuel Levy
Parker, Henry Lee	Singer, Harold Douglas
Parsons, John Herbert	Slater, Eliot Trevor Oakeshott
Paterson, Arthur Spencer	Slater, James Kirkwood
Paton, Leslie	Slesinger, Edward Gustabe
Pattison, Alfred Richard Denis	Smith, Charles Newlyn
Paul, Hugh	Smith, Robert Percy
Payne, Sylvia May	Souttar, Henry Sessions
Platt, Harry	Stammers, Francis Alan Roland
Pritchard, Eric Alfred Blake	Stenhouse, Jack Fingland Martin
Purves-Stewart, James	Stern, Ruby Olive
Purvis, Victor Bremner	Stewart, Roy Mackenzie
Pybus, Frederick Charles	Stewart, Thomas Grainger

Stewart-Wallace, Arthur Maurice	Webb-Johnson, Alfred Edward
Stoddart, William Henry Butter	Weber, Frederick Parkes
Strauss, Eric Benjamin	Weber, Hilda Marion
Strom-Olsen, Rolf	Whiting, Arthur John
Struthers, James Arthur	Whittington, Theodore Henry
Summers, Thomas Cllyer	Whitwell, James Richard
Symonds, Charles Putnam	Williams, Edward Lincoln
Talbot, Graeme Gibson	Williams, Harold George
Taylor, Frederick Ryott Percival	Williams, Herbert John
Taylor, James	Williams, John Francis
Taylor, Julian	Williams, John Hargreaves
Telling, Walter Henry Maxwell	Williams, Leonard
Thomas, William Rees	Wills, Lancelot Kenneth
Thoms, Amy MacDougall	Wilson, Isabel Grace Hood
Thomson, Herbert Cambell	Wolstencroft, John
Thomson, William Wilis Dalziel	Wood, Guy Edward
Trotter, Wilfred	Woods, Robert Standon
Turner, William Aldren	Woollard, Herbert Henry
Turtle, Godfrey de Bree	Worster-Drought, Cecil Charles
Wakeley, Cecil Pembrey Grey	Wylie, John Robert
Walker, Alfred William Hinsley	Wyllie, William Gifford
Walshe, Francis Martin Rouse	Yates, Arthur Gurney
Warner, Edwin Charles	Yealland, Lewis Ralph
Waterhouse, Rubert	Young, Robert Arthury
Watson, George William	

Table B2

Membership of the Section of Neurology, Royal Society of Medicine, 1937

Total Members	316
London Members	194
Corresponding, Honorary, and Provincial Members	122

List B3

List of Neurologists Complied by the 1953 Committee on Neurology, RCP

Alcock, N S	Jewesbury, E O C
Asby, M G C	Kendall, D
Astley, C E	Lloyd, G H T
Bates, J A V	Marshall, J
Bickerstaff, E R	Matthews, W B
Brinton, D H	Miller, H G
Campbell, A M G	Milnes, J N
Carter, A B	Nathan, P W
Cook, J B	Parsons-Smith, B
Croft, B P	Porter, R J
Dimsdale, H	Rees, W E
Espir, M L E	Rose, F C
Foley, J	Russell, W R
Foster, J B	Sandifer, P H
Gilliat, R S	Simpson, J A
Gooddy, W W	Slatter, K H
Gordon, N S	Small, J M
Graveson, G S	Spalding, J M K
Guest, I A	Spillane, J D
Guttmann, L	Stanton, J B
Hall, G S	Thomas, P K
Henson, R A	Walton, J N
Hierons, R	Wells, C E C
Holmes, J M	Whitty, C W M
Hughes, R R	Williams, D J
Hulbert, N G	Wilson, T G
Jefferson, J M	

List B4

Members of the Association of British Neurologists, 1970

Adams, J Hume	Dimsdale, Helen
Adrian, Edgar Douglas	Dixon, Gervais Joly
Alcock, N S	Downie, Alan Watt
Allen, Ingrid V	Draper, I T
Allison, Richard Sydney	Du Boulay, E P G H
Ashby, Michael	Duchen, L W
Ashworth, Bryan	Earl, Chris J
Bannister, Roger	Edwards, C H
Barrie, Margaret A	Espir, Michael L E
Barwick, D D	Feiling, Anthony
Bates, John Alexander Vincent	Ferguson, Fergus
Beaver, R	Field, E J
Behrman, Simon	Foley, John
Bickerstaff, E R	Fullerton, Pamela
Blackwood, William	Gautier-Smith, P C
Blau, J N	Gibberd, F B
Bradshaw, J P P	Gilliatt, Roger William
Brindley, G S	Gooddy, William
Brinton, Denis Hulbert	Gordon, G
Bull, James William Douglas	Gordon, Neil S
Campbell, A M G	Graham, J G
Campbell, F G	Graveson, G S
Carmichael, Edward Arnold	Guest, I A
Carroll, J D	Guttman, Ludwig
Carson, James	Hall, G S
Carter, Alan Barham	Hallpike, Charles Skinner
Cavanagh, J B	Harriman, D G F
Clark, Wilfred Le Gros	Heathfield, K W G
Clarke, Edwin	Henson, R A
Cobb, W A	Heron, J R
Cohen, Henry	Herring, A B
Colover, J	Hewer, Richard L
Cook, John Bowen	Hierons, R
Corsellis, John Arthur Nicholas	Holmes, J MacD
Critchley, Edmund	Hudgson, Peter
Critchley, Macdonald	Hughes, J T
Croft, Peter	Hughes, R R
Cumings, J N	Hulbert, Norman
Daniel, Peter	Hurwitz, L J
Davison, Alan N	Hutchinson, E C
Dawson, G D	Illis, L S
Denny Brown, Derek	Ingram, T T S

Jamieson, D G
 Jefferson, J M
 Jellinke, E H
 Jewesbury, Eric Charles Oliphant
 Johnson, Ralph
 Kelly, Reginald E
 Kendall, David
 Kocen, Roman
 Kremer, Michael
 Lees, F
 Lenman, J A R
 Liddell, E G T
 Liversedge, L A
 Lumsden, C W
 Lyle, T Keith
 Mackenzie, Ian
 Maclachlan, T K
 Mair, W G P
 Marshall, John
 Martin, E A
 Martin, James Purdon
 Matthews, W B
 Mawdsley, C
 McAlpine, Douglas
 McArdle, B
 McArdle, M J
 McDonald, W I
 McMenemy, W H
 Meadows, Swithin Pinder
 Melville, I D
 Meyer, A
 Millac, P
 Millar, J H D
 Miller, Henry
 Miller, S J H
 Milnes, J N
 Morgan-Hughes, J A
 Nathan, P W
 Natrass, F J
 Nevin, Samuel
 Nieman, E A
 Oppenheimer, D R
 Pallis, Chris
 Pampiglione, G
 Parsonage, M J
 Parsons, Malcolm

Parsons-Smith, Basil Gerald
 Pearce, J M S
 Penman, John
 Phemister, J C
 Phillips, B M
 Phillips, C G
 Polani, P E
 Powell, T P S
 Pratt, R T C
 Rawson, R T C
 Rees, W Esmond
 Reid, R G
 Renfrew, Stewart
 Roberts, John R
 Robertson, E G
 Robinson, P K
 Rose, F Clifford
 Rudolf, G De M
 Rushworth, G
 Russell, Dorothy
 Russell, R W Ross
 Russell, W Ritchie
 Scott, G I
 Shaw, David A
 Sheldon, Philip W E
 Silver, John Russell
 Simpson, John
 Slatter, K H
 Small, Michael J
 Smith, Honor
 Smith, Marion
 Smith, W T
 Smyth, G E
 Spalding, J M K
 Spillane, J D
 Stewart-Wallace, A M
 Strich, Sabina J
 Sumner, D W
 Sutton, D
 Swallow, M
 Symonds, Charles
 Thomas, P K
 Thompson, R H S
 Tizard, J P M
 Turner, J W
 Urich, H

Wakefield, G S
Walshe, Francis Martin Rose
Walton, John N
Watson, W
Webb, H W
Weddell, A G M
Wells, Charles Edward Cecil
Whitteridge, David
Whitty, Charles William Michael
Wilkinson, Marcia I P
Williams, Denis John
Willison, R G
Wilson, J
Wilson, T Grahame
Woodcock, Susan
Worster-Drought, Cecil
Yealland, M
Zilkha, K J

Appendix C - 100 Members of the Association of British Neurologists

The following charts and tables are an approximate representation of this group's characteristics. The information below examines social, education, and professional background. Limited information is also presented about private lives. The limitations of this data are described where necessary.

General Information

Table C1 – 100 Members of the Association of British Neurologists

Name	Birth	Death	Name	Birth	Death
Adie, William John	31/10/1886	17/03/1935	Gordon, Ronald Grey	03/03/1889	26/04/1950
Adrian, Edgar Douglas	30/11/1889	04/08/1977	Graveson, George Stanley	10/05/1915	16/04/1976
Allison, Richard Sydney	15/05/1899	27/04/1978	Greenfield, Joseph Godwin	01/05/1884	03/03/1958
Astley, Clifford Eric	03/03/1915	03/02/1995	Guest, Isidore Arthur	09/09/1911	03/08/1978
Barnes, Arthur Stanley	15/11/1875	11/08/1955	Guttmann, Ludwig	03/07/1899	18/03/1980
Bates, John Alexander Vincent	24/08/1918	16/07/1993	Hall, George	01/01/1879	11/01/1955
Behrman, Simon	14/12/1902	09/12/1988	Hall, Gilbert Steward	01/01/1902	06/09/1976
Biggart, John Henry	17/11/1905	21/05/1979	Hallpike, Charles Skinner	19/07/1900	26/09/1979
Birley, James Leatham	12/07/1884	06/03/1934	Harris, Wilfred John	02/12/1869	29/02/1960
Brain, Walter Russell	01/01/1895	01/01/1967	Henson, Ronald Alfred	04/10/1915	01/12/1994
Bramwell, Edwin	11/01/1873	21/03/1952	Hinds Howell, Conrad Meredyth	26/04/1877	09/05/1960
Brinton, Denis Hulbert	09/12/1902	13/05/1986	Holmes, Gordon Morgan	22/02/1876	29/12/1966
Brown, Thomas Graham	27/03/1882	28/10/1965	Hulbert, Norman George	03/01/1911	09/11/1982
Bull, James William Douglas	23/03/1911	05/07/1987	Ironside, Redvers Noel	23/12/1899	18/07/1968
Buzzard, Edward Farquhar	20/12/1871	17/12/1945	Jewesbury, Eric Charles Oliphant	10/06/1909	15/05/1996
Campbell, Archibald Malcolm Gordon	11/12/1909	04/03/1972	Johnson, William	03/09/1885	15/03/1949
Carmichael, Edward Arnold	29/03/1896	09/02/1978	Kelly, Reginald Edward	21/03/1917	05/09/1990
Carson, James	01/02/1908	27/05/1993	Kremer, Michael	27/11/1907	01/03/1988
Carter, Alan Barham	05/02/1907	08/08/1995	Liversedge, Laurence Atkinson	11/04/1914	01/03/1979
Clarke, Edwin Sisterson	18/06/1919	11/04/1996	Lloyd, Geoffrey Herbert Thornley	06/05/1919	30/09/1981
Cloake, Philip Cyril Powter	29/06/1890	14/03/1969	Lyle, Thomas Keith Selfe	26/12/1903	09/05/1987
Cohen, Henry	21/02/1900	07/08/1977	Mackenzie, Ian Carville Keith	18/09/1913	25/12/1991
Collier, James Stansfield	01/01/1870	09/02/1935	Martin, James Purdon	11/06/1893	07/05/1984
Cook, John Bowen	16/04/1921	18/10/1987	McAlpine, Douglas	19/08/1890	04/02/1981
Core, Donald	14/10/1882	08/02/1934	McArdle, Michael John Francis	13/10/1909	27/01/1989
Corsellis, John Arthur Nicholas	30/01/1915	27/10/1994	McMenemy, William Henry	16/05/1905	24/11/1977
Critchley, Macdonald	02/02/1900	15/10/1997	Meadows, Swithin Pinder	18/04/1902	01/05/1993
Croft, Peter Basil	14/06/1922	23/07/1981	Miller, Henry George	13/12/1913	25/08/1976
Cumings, John Nathaniel	04/10/1905	22/08/1974	Natrass, Frederick John	06/08/1891	19/01/1979
Denny-Brown, Derek Ernest	01/06/1901	20/04/1981	Nevin, Samuel	08/09/1905	13/09/1979
Dimsdale, Helen	02/07/1907	20/04/1977	Parsons-Smith, Basil Gerald	19/11/1911	21/04/1995
Dixon, Gervais Joly	03/04/1909	08/10/1996	Penman, John	10/02/1913	05/01/1994
Downie, Allan Watt	05/09/1901	26/01/1988	Philips, Charles Garrett	13/10/1916	09/09/1994
Duchen, Leo Wilfred	15/10/1928	02/08/1996	Porter, Robert Johnston	04/11/1910	19/03/1969
Edwards, Charles Harold	18/05/1913	01/12/1996	Pratt, Richard Thomas Charles	24/10/1917	20/03/1983
Elkington, John St. Clair	19/06/1904	21/01/1963	Pritchard, Eric Alfred Blake	01/01/1899	09/06/1962
Feiling, Anthony	30/09/1885	20/05/1975	Purser, Francis Carmichael	01/01/1877	28/02/1934
Ferguson, Fergus Robert	15/12/1899	26/08/1974	Rees, William Esmond	28/11/1900	07/08/1977
Garland, Hugh Gregory	08/10/1903	23/10/1967	Riddoch, George	27/12/1888	24/10/1947
Gilliatt, Roger William	30/07/1922	19/09/1991	Robertson, Edward Graeme	20/10/1903	25/12/1975
Golla, Frederick Lucien	11/08/1877	06/02/1968	Russell, Dorothy Stuart	27/06/1895	19/10/1983

Name	Birth	Death	Name	Birth	Death
Russell, William Ritchie	07/02/1903	08/12/1980	Turner, John William Aldren	13/02/1911	12/10/1980
Sandifer, Paul Harmer	25/04/1908	29/12/1964	Walshe, Francis Martin Rouse	19/09/1885	21/02/1973
Smith, Honor Mildred Vivian	13/11/1908	18/01/1995	Wells, Charles Edward Cecil	09/03/1917	09/05/1993
Smith, Marion Cecilia	15/01/1915	19/10/1988	Whitteridge, David	22/06/1912	15/06/1994
Smyth, George Geoffrey Evanson	27/02/1907	14/12/1989	Whitty, Charles William Michael	15/11/1914	04/03/1996
Spillane, John David	07/05/1909	23/07/1985	Williams, Denis John	06/12/1908	26/11/1990
Stanton, John Bernard	14/10/1917	23/03/1970	Wilson, Samuel Alexander Kinnear	06/12/1874	12/05/1937
Stewart, Thomas Grainger	01/01/1878	30/03/1957	Worster-Drought, Cecil Charles	02/08/1888	28/10/1971
Symonds, Charles Putnam	11/04/1890	07/12/1979	Wyllie, William Gifford	01/01/1889	24/10/1969

Chart C1 - Decade of Medical Qualification

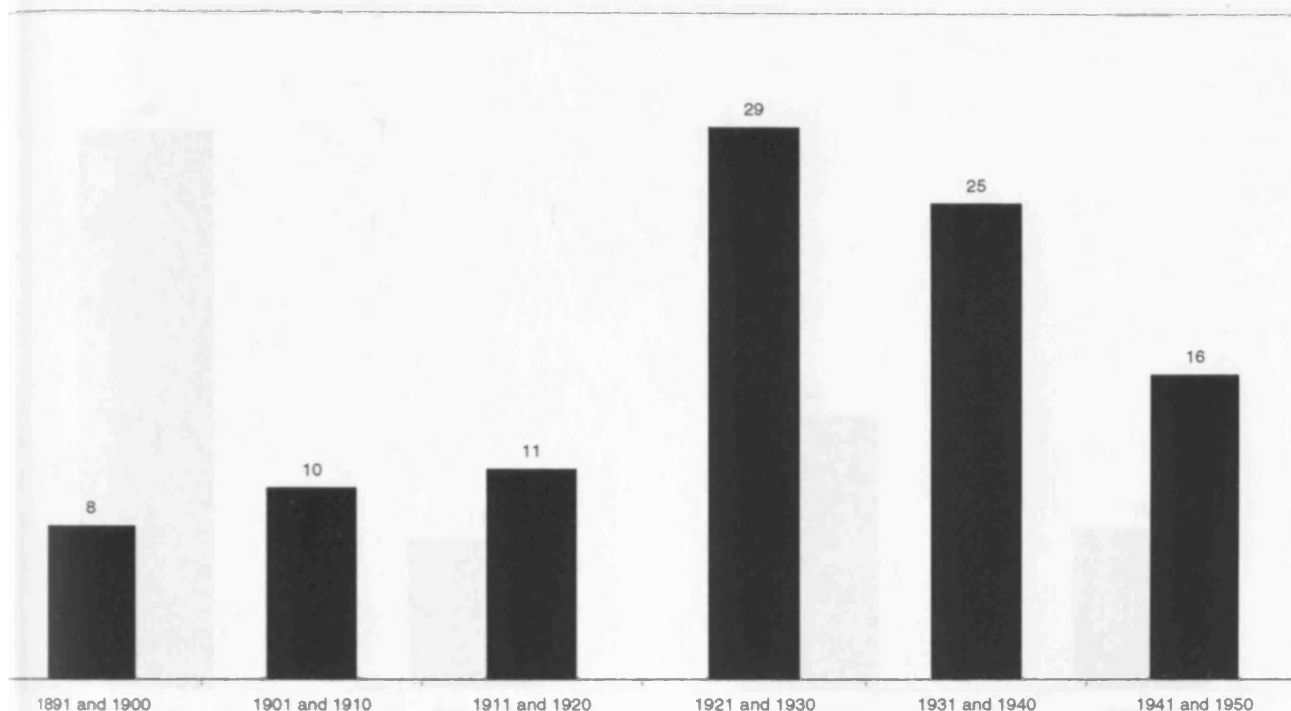


Chart C1: No individual in this group qualified before 1891. More individuals would have qualified in the period between 1941 and 1950 than are reflected in this data. However, this study examines only deceased individuals who were elected to the membership of the Association of British Neurologists (ABN). Some who qualified in the late 1940s are still alive. In addition, according to the Committee on Neurology at the Royal College of Physicians, five individuals who trained in neurology emigrated in this period. It is likely that the number of individuals training in neurology in this period did not wane.

Chart C2 - Decade of Election to the Association of British Neurologists

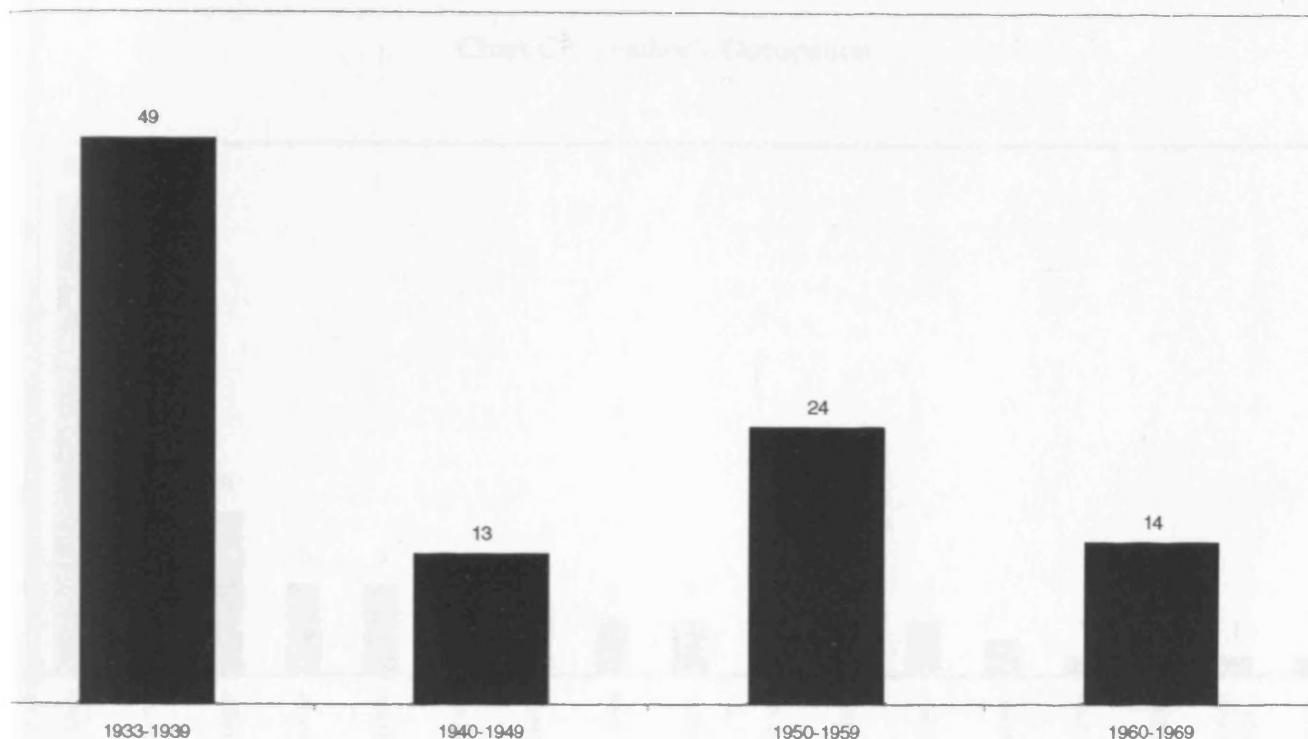


Chart C2: In order to have a more comprehensive dataset, it was necessary to broaden the period of this study to include individuals elected to the membership of the Association of British Neurologists in the period between 1960 and 1969. Three individuals in this study (Robert Porter, John Stanton, and Geoffrey Lloyd) may not have been elected to the ABN. Robert Porter (1910-1969) and John Stanton (1917-1970) both died before the 1970 membership was published. Though both responded to a survey of neurology conducted by the Committee on Neurology at Royal College of Physicians in the 1953, neither was made FRCP until 1964 and 1965 respectively. It is likely that they were elected to the ABN in the 1960s. Geoffrey Lloyd died in 1981, and his name does not appear in a list of members from 1980. He is included in this study because the Committee on Neurology contacted him (and he responded) when they were conducting the 1953 survey.

Social Background and Early Education

Chart C3 – Father's Occupation

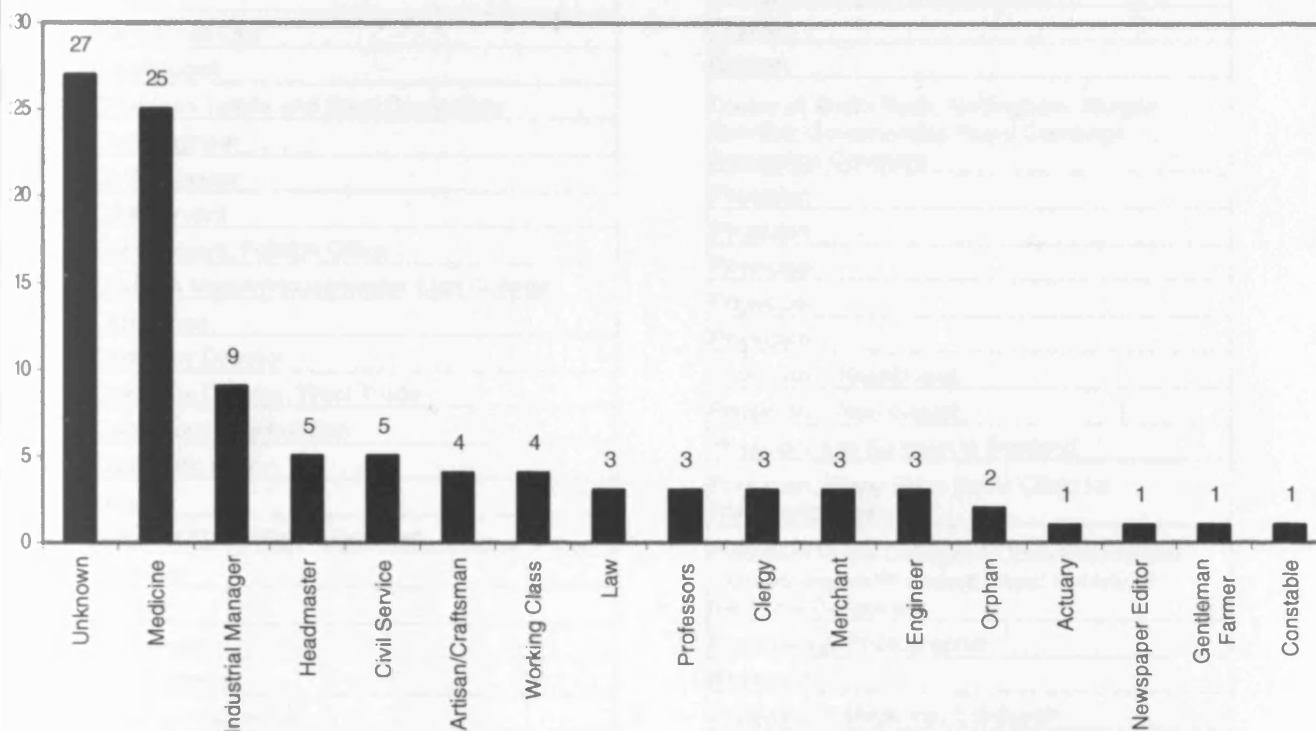


Chart C3: The challenge with occupational data of this kind – other than the obvious paucity of information – is categorising it objectively. Table 2A (below) provides the actual categories as found in the sources. Clearly the differences, for example, between types of managers, engineers, clergyman, and professors are significant. Here I have sought, however, to link occupations together in a more logical way. For example, I put Professors of Medicine in the Medicine category rather than the Professors category. All obviously high-ranking roles in companies, factories, and industry were categorised as industrial managers. The occupations of the four that I called ‘working class’ were: fisherman, farmer, gas collector, and draper. The fisherman was identified as not owning a boat, while the draper was described as being impoverished. The farmer (James Purdon Martin’s father) was not identified by name, though he was described as Irish. Given Purdon Martin’s educational background – a scholarship in modern languages at Queen’s University – as well as a lack of information about his childhood, I have judged that he came from a poor Irish family. It is noteworthy that three figures in this study had fathers who were members of the Neurological Society of the United Kingdom. It is interesting that 2 of the 4 women in this study came from extremely wealthy families – Helen Dimsdale and Honor Smith. Smith and Dimsdale became Consultant Neurologists. In contrast, Dorothy Russell (orphan) and Marion Smith (background unknown) became pathologists.

Table C2 – Father's Occupation

Actuary	Officer, Royal Irish Constabulary
Anaesthetist, St Mary's Hospital	Ophthalmic Surgeon, physiologist, Dean of King's College Hospital Medical School
Artisan	Orphan
Barrister-at-Law	Orphan
Cardiologist	Owner of Smith Bank, Nottingham; Morgan Grenfell; Governorship Royal Exchange Assurance Company
Chairman Textile and Steel Companies	Physician
Civil Engineer	Physician
Civil Engineer	Physician
Civil Servant	Physician
Civil Servant, Foreign Office	Physician
Classics Master/Housemaster Eton College	Physician
Clergyman	Physician
Company Director	Physician – Neurologist
Company Director, Wool Trade	Physician – Neurologist
Consultant Paediatrician	Physician and Surgeon in Scotland
Diplomatic Corp	Physician, Royal Brine Baths Clinic for Rheumatic Diseases
Draper	President Royal College of Obstetricians and Gynaecologists/President Royal Society of Medicine/Consultant
Editor of "The Wigan Observer"	Professional Photographer
Engineer	Professor
Farmer	Professor of Medicine, Edinburgh
Fisherman	Professor of Physic, Edinburgh University
Gas Collector	Professor of Physics
General Practitioner	Professor/FRS
General Practitioner	Sales Manager, Lancashire Steel Corporation
General Practitioner, Cornwall	Schoolmaster
General Practitioner, Shropshire	Solicitor
Gentleman Farmer	Solicitor
Gun Designer, Woolwich	Surgeon General, India Medical Services
Headmaster	Surgeon, Guy's Hospital
Headmaster	Tinplate Works Manager
Indian Civil Servant	Toy Merchant
Industrialist/Capitalist	Violin Maker
Influential Timber Merchant	Woollen Manufacturer's Agent
Legal Adviser to Local Government Board	
Lieutenant Colonel, Indian Medical Service	
Manufacturer	
Medical Practitioner	
Merchant	
Metallurgist/Principal University College Swansea	
Methodist Minister	

Table C2: Unknowns have been excluded from this table.

Chart C4 – Place of Birth

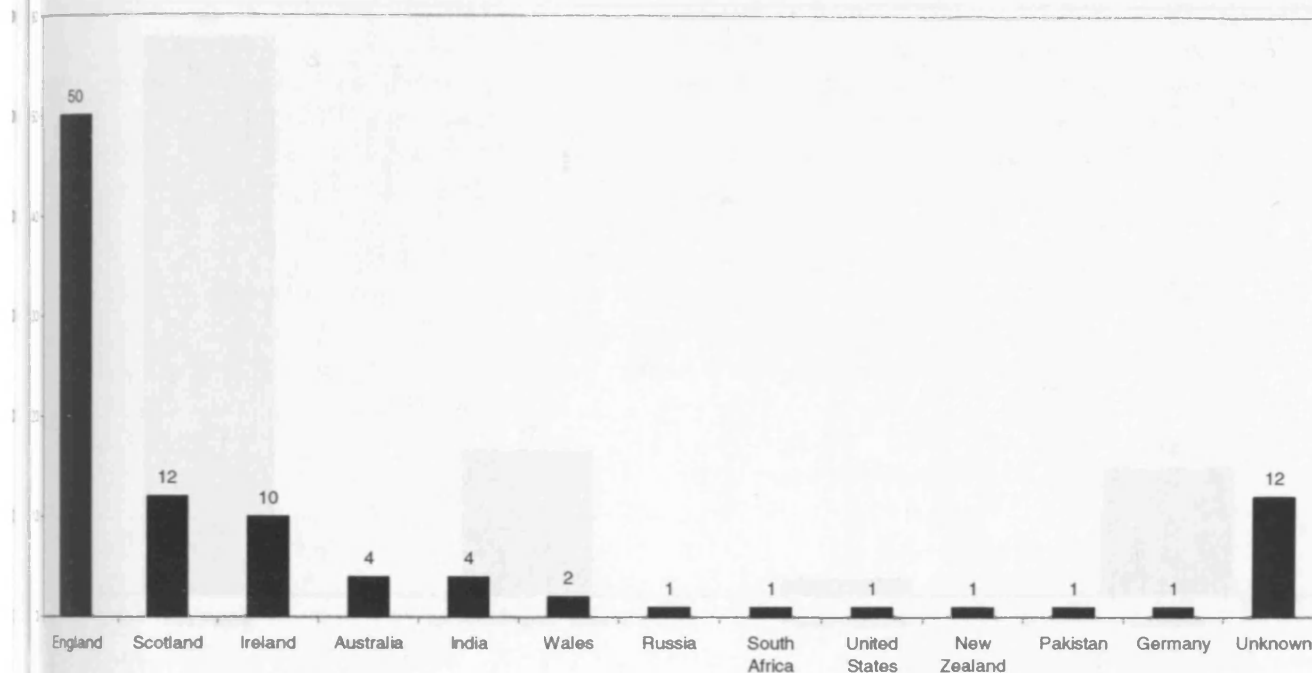


Chart C4: As a mode of analysis, 'Place of Birth' is somewhat misleading. Though 14% of the individuals in this study were born abroad (not including those from Ireland), many spent their childhood and adolescence in Britain. For example, Charles Skinner Hallpike was born in Islamabad (present-day Pakistan), yet he was educated at St Paul's School and Guy's Hospital. In total, only 4 individuals born in commonwealth nations attended primary, secondary school, and university in their country of birth. Exceptions other than those 4 were: Samuel Alexander Kinnier Wilson, born in the United States to a Scottish mother, who studied at Edinburgh University and spent the remainder of his life in Britain. Ludwig Guttman, born in Germany, studied at Freiberg, and practiced medicine there until the 1930s, when he and his family were forced to flee Nazi purges. Simon Berhman was born in Russia. He appears to have studied in Germany, before attending University College London. He spent the remainder of his life practising medicine in London.

Chart C5 – Secondary Education

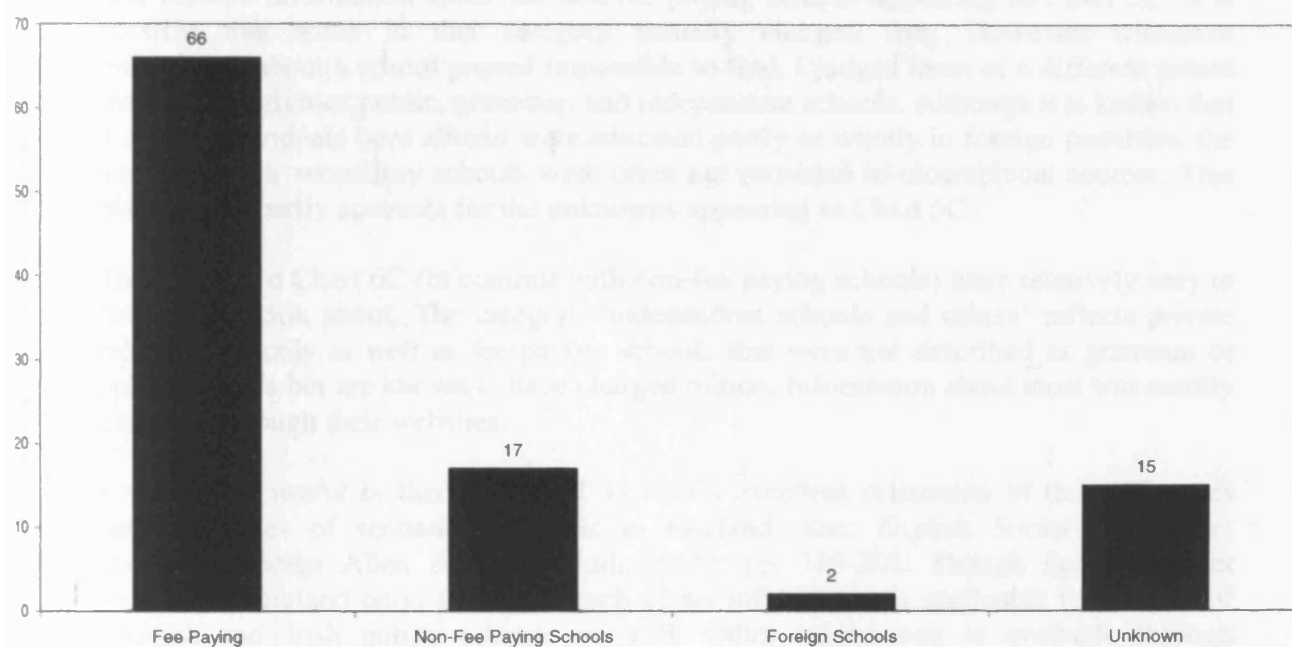
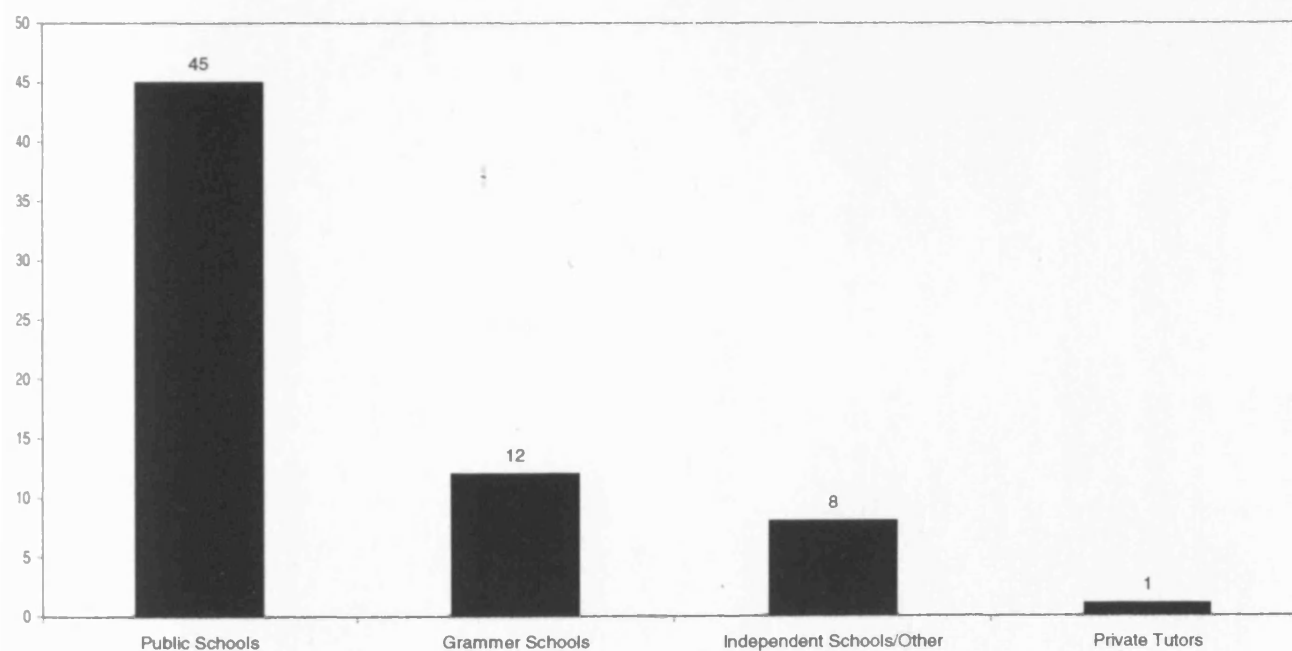


Chart C6 – Types of Fee Paying Schools



Charts C5 and C6: These data reflect educational backgrounds. It proved difficult to find reliable information about the non-fee paying schools appearing in Chart 5C. It is possible that some in that category actually charged fees. However, whenever information about a school proved impossible to find, I judged them of a different nature from the prestigious public, grammar, and independent schools. Although it is known that 4 of the individuals born abroad were educated partly or wholly in foreign countries, the names of their secondary schools were often not provided in biographical sources. This discrepancy partly accounts for the unknowns appearing in Chart 5C.

The schools in Chart 6C (in contrast with non-fee paying schools) were relatively easy to find information about. The category 'independent schools and others' reflects private religious schools as well as fee-paying schools that were not described as grammar or public schools but are known to have charged tuition. Information about most was readily available through their websites.

I also found useful in this analysis T H Pear's excellent discussion of the differences between types of secondary schools in England. See: *English Social Differences* (London: George Allen & Unwin Ltd, 1955), pp. 189-208. Though Pear's account focuses on England only, I believe much of his information is applicable to the case of Scottish and Irish public schools as well. Other information is available through wikipedia, which includes lists (and sometimes hyperlinks) of the oldest public, independent, and grammar schools in Britain.

University and Medical Education

Chart C7 – Place of First University Degree and/or Medical Degree

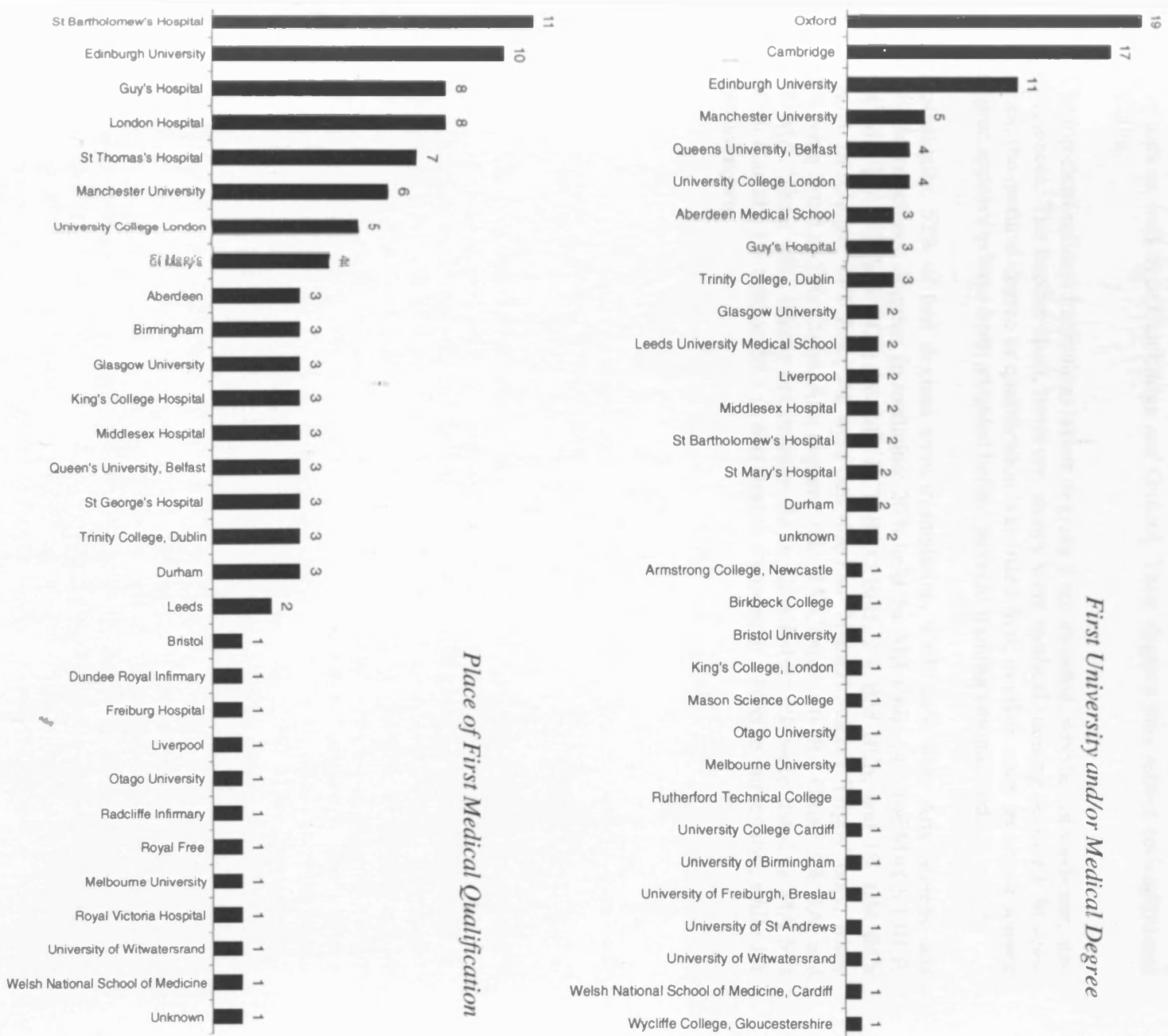


Chart C7: In order to examine university and medical education, it became necessary to discriminate between first university and medical degrees. These charts show institutions at which first degrees were obtained only. Part of the difficulty this dataset presents is that many Cambridge and Oxford medical students studied in the London teaching hospitals as well as at Cambridge and Oxford. Their degrees thus reflect co-institutional training.

The top chart reflects institutions where degrees were awarded, whether in medicine, arts, or sciences. The bottom chart, however, shows where medical training occurred. In some cases, the medical degree or qualification was listed first, in other cases an arts or science degree appears to have been awarded before medical training commenced.

Statistically: 52% of first degrees were in medicine, while 24% were Arts degrees, and 18% were science degrees. In medicine: 20% held the MB ChB; 14% the MRCS LRCP; 9% MB BS; 3% MB BCh; 3% MB BCh BAO Belf; 2% BM BCh; and 1% BM BCh Oxon. In science: 14% BSc; 3% were described as 'Natural Science Tripos' only, while 1% were listed as BSc Oxon. Arts degrees: 9% BA Cantab; 6% BA Oxon; 5% BA; and 4% MA. Some were simply not comparable or classifiable: 2% were listed as MA MB BChir Cantab; 1% held an MD (a first degree awarded at a foreign university), while 1% was unknown.

Chart C8 – Geographic and Temporal Distribution of First Degree by Decade of Qualification

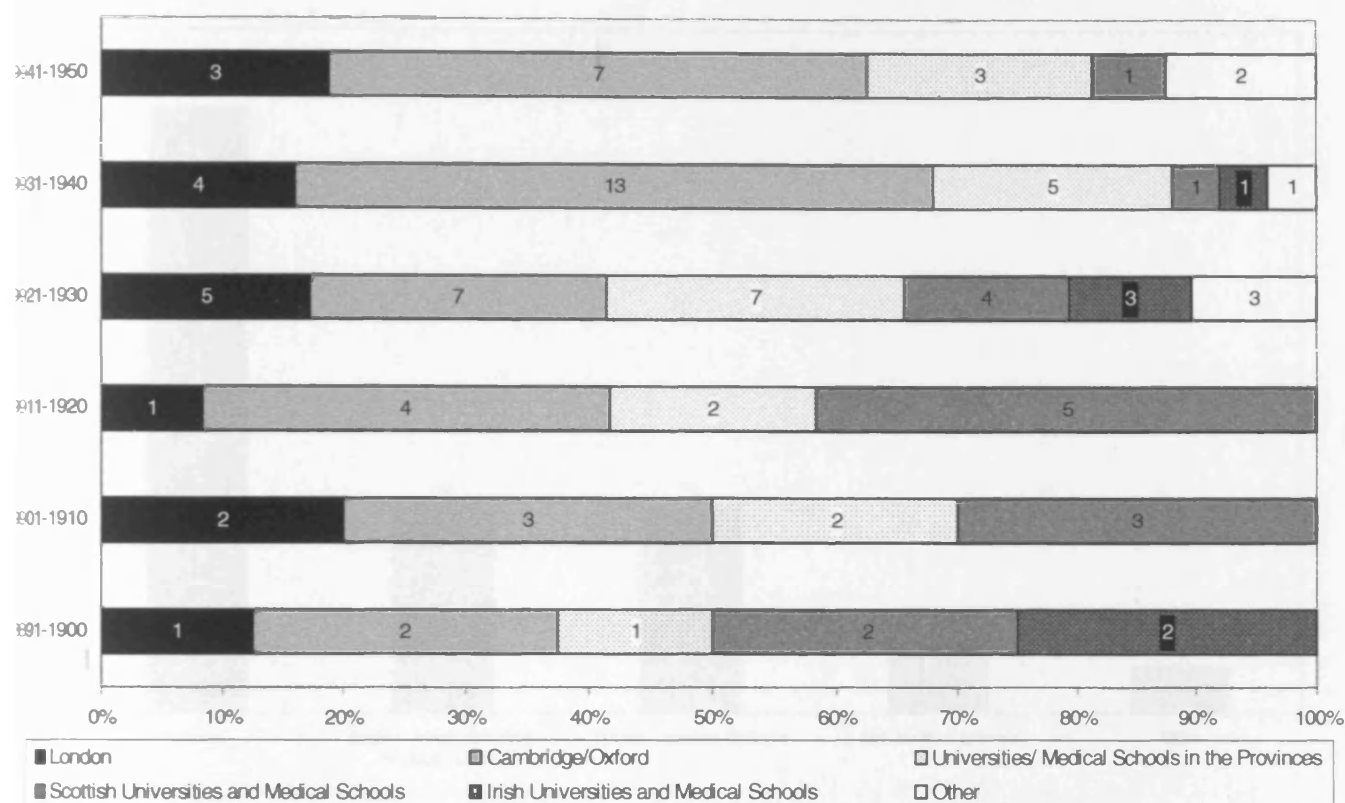


Chart C8: This chart reflects the temporal and spatial distribution of degrees awarded by decade of qualification. In general, no decade here presents a sample of individuals large enough for critical analysis. As Chart 7C indicated, we might treat London, Oxford, and Cambridge as a whole unit. However, because the values here reflect the first degree received, attendance at Scottish Universities and Medical Schools diminishes for the period between 1890 and 1920. (Two students completed degrees at Cambridge before applying to Edinburgh Medical School.) There is a noteworthy increase in the number of students entering the field in the interwar period (1921-1940). This increase is also reflected in Chart 1C. This is not due to a sampling bias. Chapter 2 of this dissertation has indicated that departments of nervous diseases and neurology began to be formed with regularity after 1920. In addition, Chapter 7 described how funds for research and education became available to neurology in this period as well. It is likely that these increases in entrants to neurology continued throughout the remaining decades of the twentieth century, especially as the hospitals under the Nationalised Health Service became consolidated and modernised. As indicated for Chart 1C, the seeming decrease in students in the 1940s probably reflects more a sampling bias than it does a decrease in the number of students being trained in the field. However, it may be the case that military service between 1939 and 1948 prevented most medical students (not just in neurology) from completing specialist training in that decade.

Chart C9 – Geographic Distribution of Medical Training

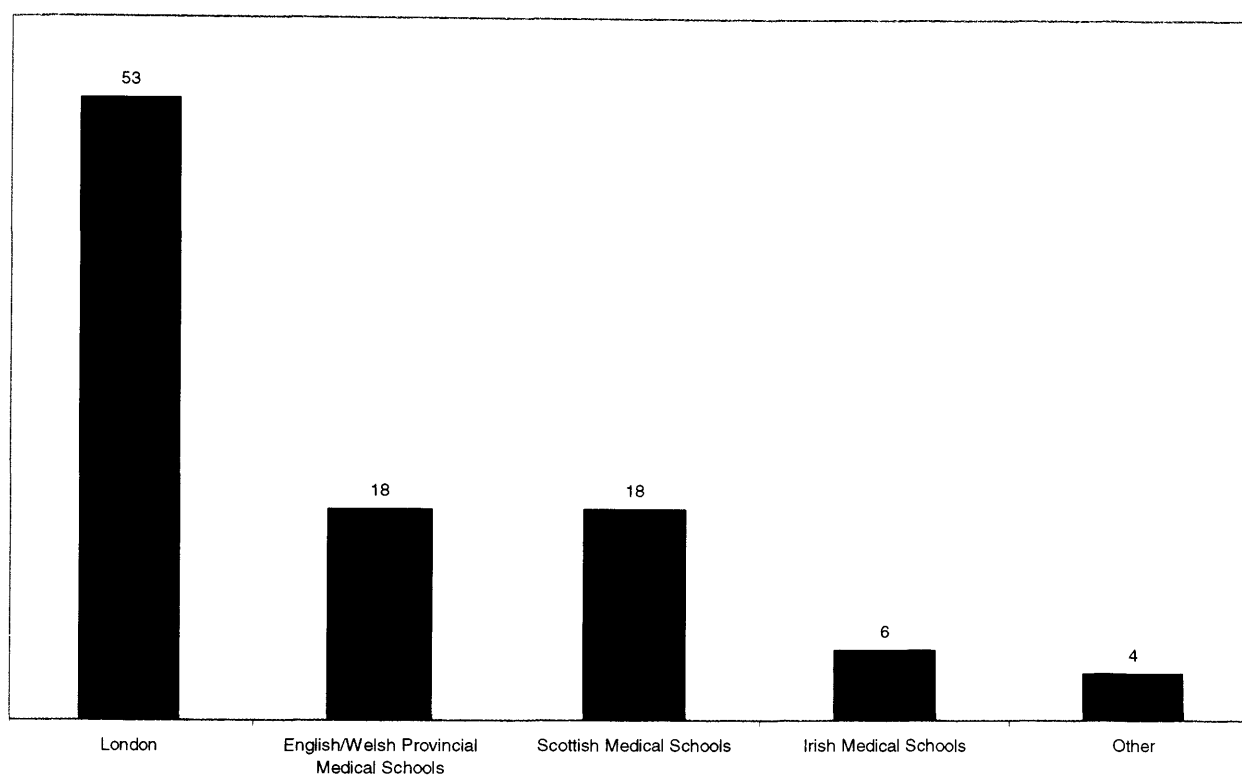


Chart C9: The individuals in this study all qualified in medicine between 1890 and 1950. Representing this data structurally indicates the geographic distribution of medical study throughout this period. Clearly the London Medical Schools dominated throughout this period. The draw of the metropolis – its population as well as financial and material resources – may partly explain the London-centric nature of neurology throughout this study. Still it must be remembered that in 1902 seventy-three members of the Neurological Society of United Kingdom lived outside the Capital, while ten others lived in Scotland and five in Wales. Likewise in 1937, 122 members of the Section of Neurology lived outside London. Those these facts are demonstration of interest in neurologic topics across this period, they cannot, however, be taken as confirmation of active neurologists working across the country.

Chart C10 – Scholastic Achievement and Research Distinction

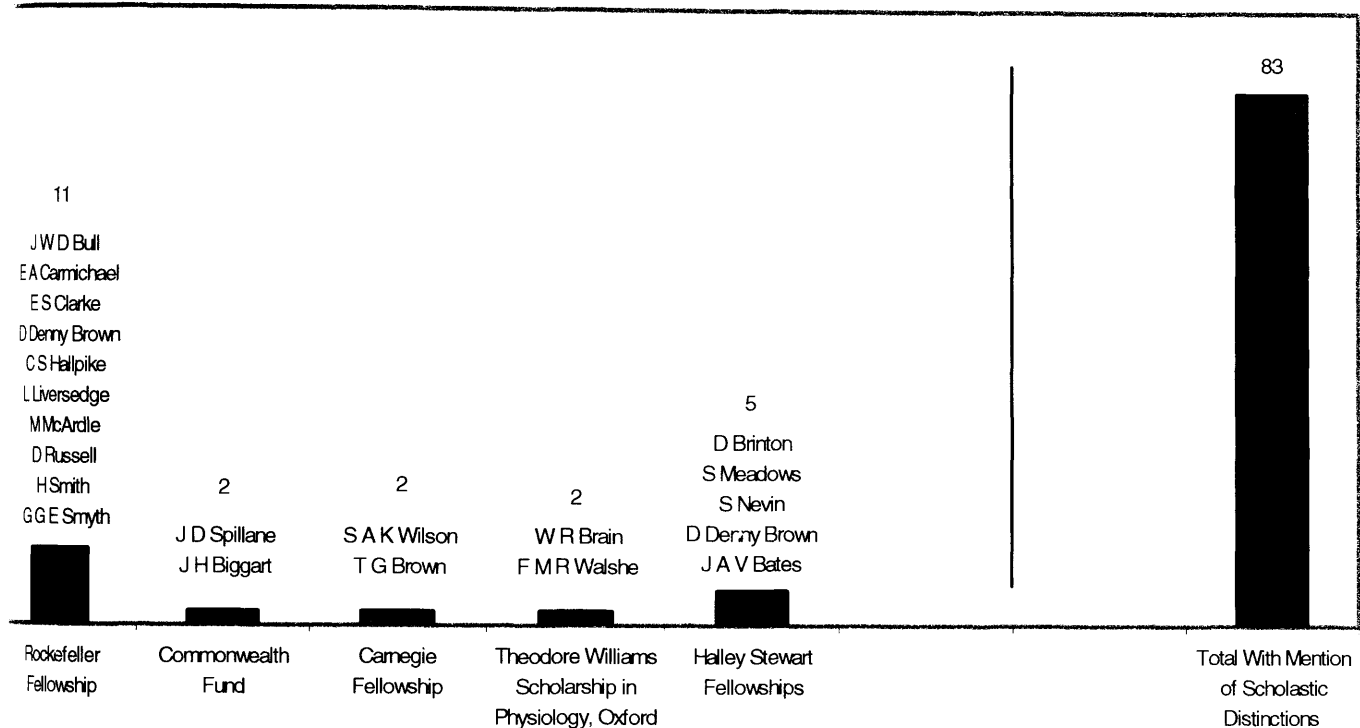


Chart C10: As a group, this data suggest that these physicians performed highly during the course of their education. 12 received one or more gold medals, 13 academic prizes, 23 entrance or academic scholarships, and 23 received research fellowships following the completion of their degrees. Edgar Adrian (1889-1977), at the time of his death, still held the honourable position of having received the highest marks ever given at Cambridge. Listed separately here are fellowships that may be a particular interest. Notable is that both F M R Walshe and W R Brain were awarded the *Theodore Williams Scholarship* to work with Charles Sherrington. The *Halley Stewart Fellowship* was briefly discussed in Chapters 5 and 7 of this dissertation. However, not all of the winners of that fellowship are listed here; nor were they all members of the ABN. (Not included here are: John Gaylor, awarded the fellowship in 1933, Joseph Doupe, a Canadian hailing from Winnipeg, in 1934, and William Honeyman in 1938.) The fellowship seems to have been discontinued during or after the Second World War. Though numerous figures in British neurophysiology, neuropsychiatry, and neurology received travelling fellowships from the Rockefeller Foundation, only listed here are those who received awards to continue training. Others, such as Edgar Adrian, who became eventually a Trustee of the Foundation, received occasional travel subsidy from the Foundation throughout their careers. It is noteworthy that Dorothy Russell and Honor Smith (2 of 4 women in this study) received Rockefeller Fellowships. Russell spent her time with Wilder Penfield at the Montreal Neurological Institute and with Adolf Meyer in Baltimore. Honor Smith spent a year at the Boston Hospital for Sick Children before returning to Oxford where she worked in one of the MRC's Peripheral Nerve Injury Centres.

Chart C11 – Foreign Study by Countries Visited (n=30)

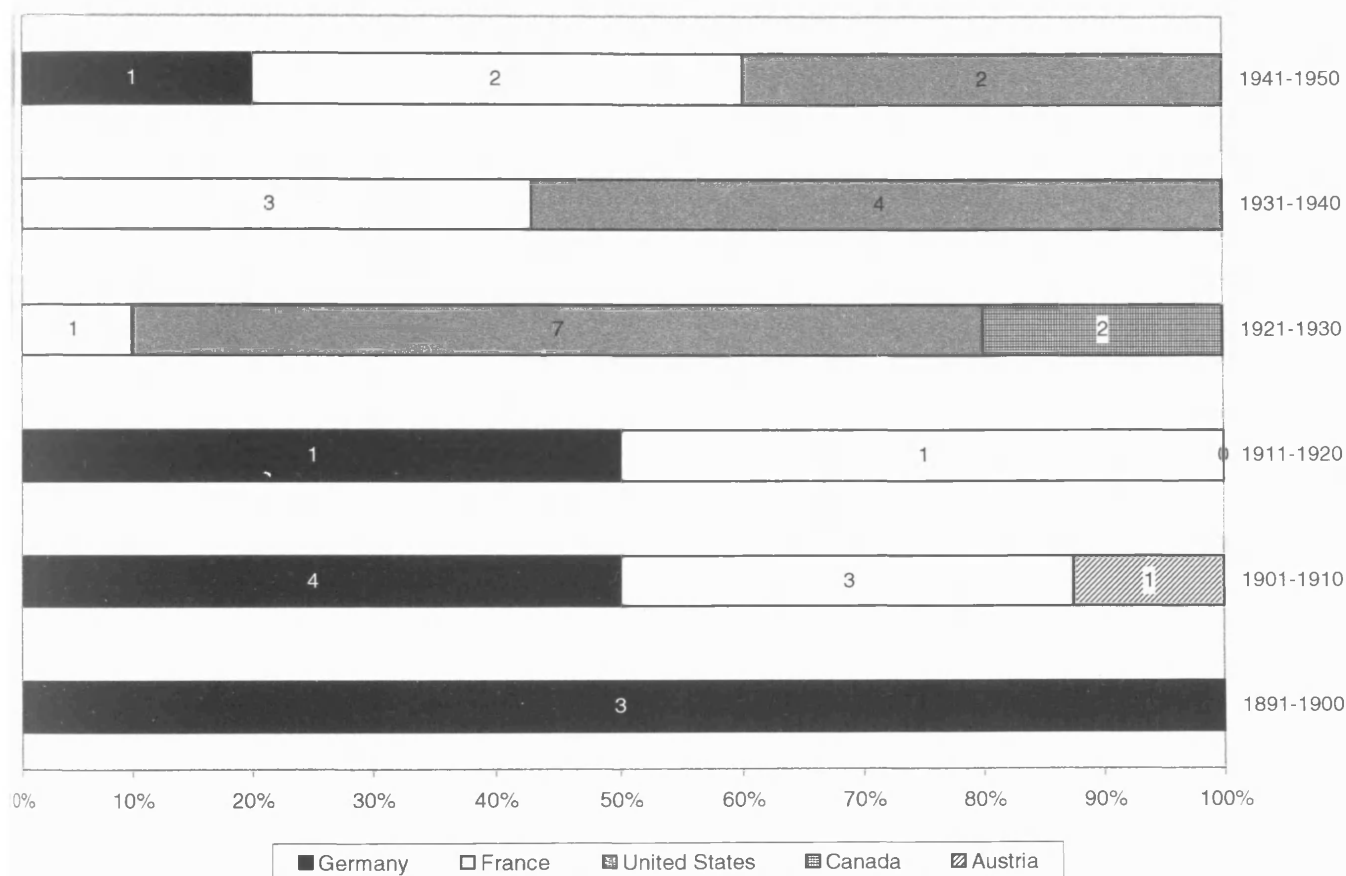


Chart C11: Foreign travel, research, and study have been considered an integral component of medical and neurologic training throughout the twentieth century. Byrom Bramwell wanted his son, Edwin, to spend one year respectively in Germany, France, and Italy. In his 1933 essay on the training of the neurologist, Francis Walshe not only thought it highly desirable but believed it was essential. The 1945 Committee on Neurology ‘strongly encouraged’ a year abroad in their recommendations on the training of the neurologist. This was reiterated in later reports.

Data here (and in Table 3C) show that between 1890 and 1910, Germany and German speaking countries were popular places for foreign study. It is interesting that France, by contrast, seems to have been less attractive, despite the existence of its credible neurologic tradition. It seems likely that this trend towards Germany reflects the German State’s investment in laboratory research in this period. Little foreign study occurred during 1914-1919. Startling, though expected, is the subsequent and dramatic shift towards North America in the interwar period. Nor does this represent the influence of Rockefeller Foundation Funding alone. It provided 9 travelling fellowships for this period. Of these, 7 were for study in North America, while 2 were for time in France. This shift represents changes in geo-political realities, as well as social philosophies.

Table C3: Foreign Study

Adie, William John	1911	Germany
Biggart, John Henry	1928	France
Bramwell, Edwin	1896	Germany; France
Brown, Thomas Graham	1906	Germany; Austria
Bull, James William Douglas	1932	France
Carter, Alan Barham	1931	United States
Clarke, Edwin Sisterson	1945	United States
Core, Donald	1906	France
Denny-Brown, Derek Ernest	1924	United States
Downie, Allan Watt	1923	United States
Feiling, Anthony	1909	Germany
Hallpike, Charles Skinner	1924	United States
Holmes, Gordon Morgan	1898	Germany
Jewesbury, Eric Charles Oliphant	1935	United States
Johnson, William	1908	France; Germany
Kelly, Reginald Edward	1942	France
Liversedge, Laurence Atkinson	1944	United States
McAlpine, Douglas	1913	France
McArdle, Michael John Francis	1932	France
Miller, Henry George	1937	United States
Nevin, Samuel	1927	United States
Purser, Francis Carmichael	1899	Germany
Russell, Dorothy Stuart	1923	United States; Canada
Smith, Honor Mildred Vivian	1940	United States
Smyth, George Geoffrey Evanson	1931	France
Spillane, John David	1933	United States
Symonds, Charles Putnam	1920	United States
Wells, Charles Edward Cecil	1943	France; Germany
Williams, Denis John	1929	United States; Canada
Wilson, Samuel Alexander Kinnear	1902	France; Germany

Table C3: These 30 went abroad for training and study following or during the course of their medical training.

Chart C12 – Distribution of Degrees, Diplomas, and Certificates

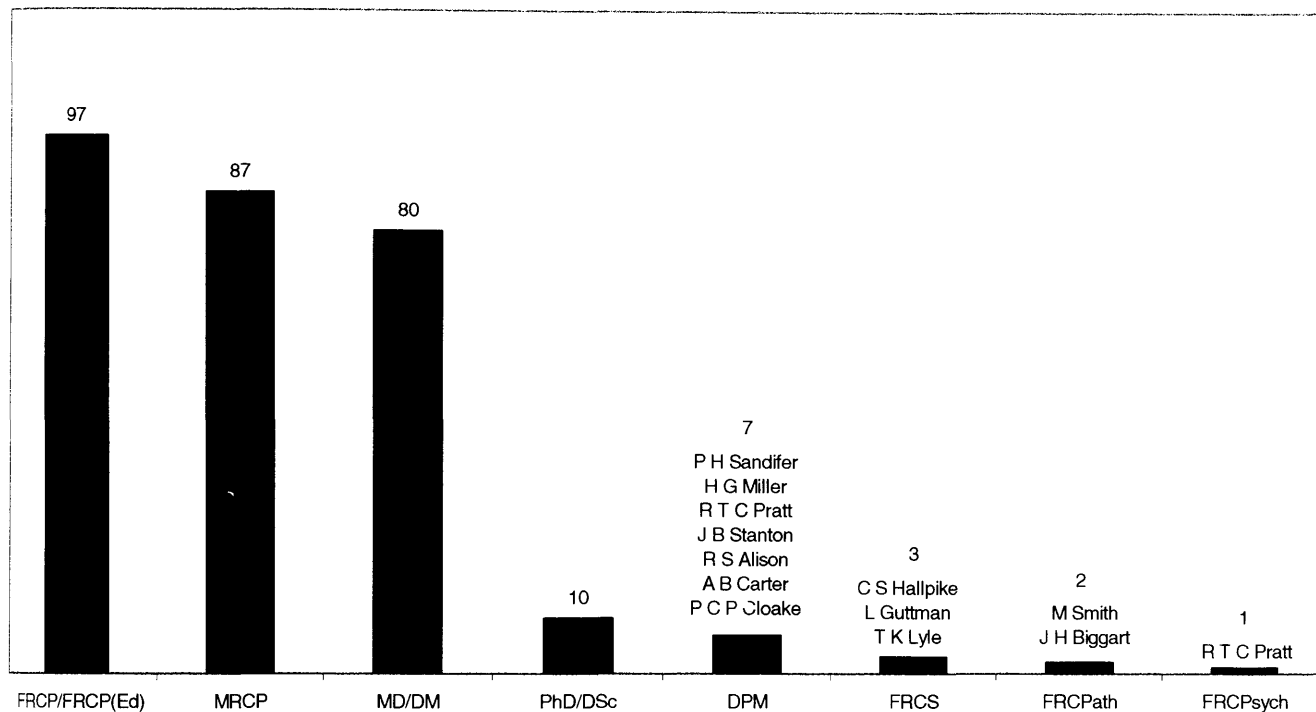


Chart C12: These data reflect higher educational degrees, diplomas, and certificates held by these individuals. Three did not possess the FRCP; they were T G Brown, a physiologist, and J G Greenfield and L Duchen, both pathologists. Five held the diploma of the Royal College of Physicians Edinburgh, FRCP(Ed). They were: R G Gordon, J B Stanton, W R Russell, E Bramwell, and J B Stanton. Figures holding the PhD or DSc were: A Stanley Barnes DSc(1906), J H Biggart DSc(1936), D Denny Brown DPhil Oxon (1928), Allan Watt Downie DSc(1937), L Duchen PhD(1963), W R Russell DPhil Oxon (1955), F M R Walshe DSc(1924), D Williams DSc(1942), and S A K Wilson DSc(1912). Also included here is C G Philips Hon DSc – a degree given when he was appointed Chair of Neuropathology at Oxford.

Professional Career

Chart C13 – Number of Known Appointments at Specialists Hospital

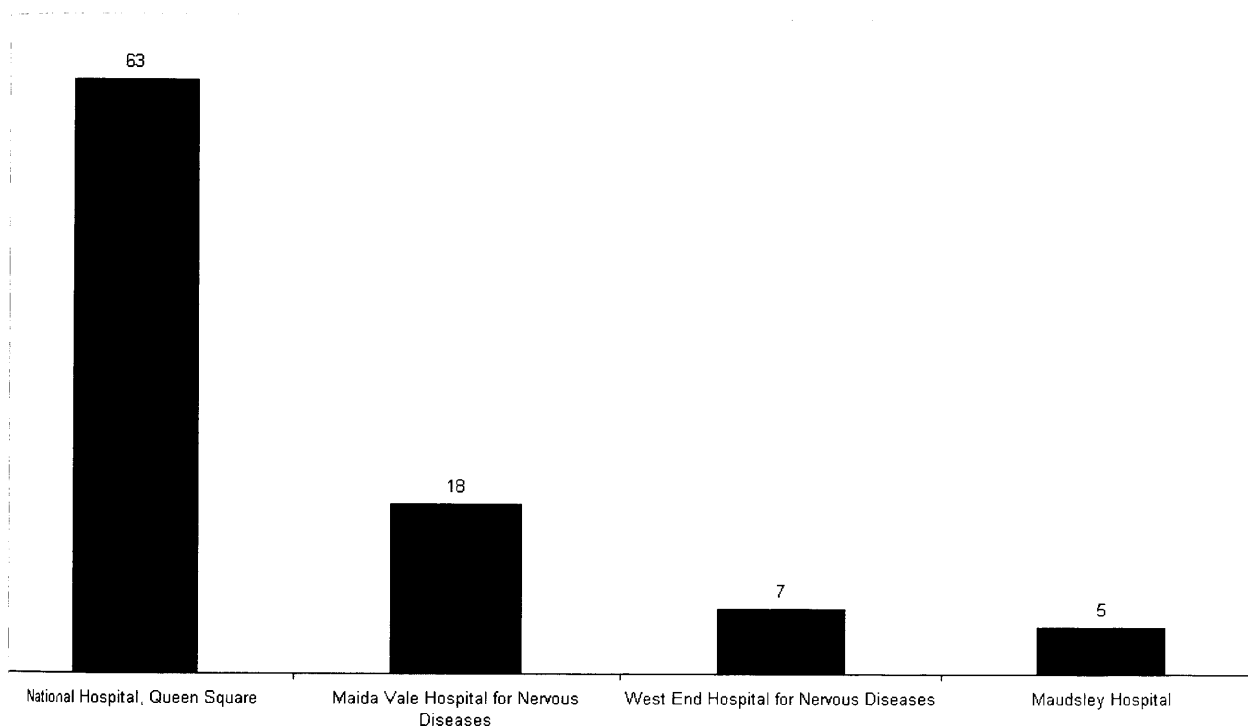


Chart C13: Chapter 2 described the structure of these hospitals. During the interwar period, 12 physicians were employed fulltime at the National Hospital, Queen Square, 9 at Maida Vale, and 6 at the West End Hospital. Junior physicians (resident house physicians, resident medical officer, medical registrars, pathologists, senior medical registrars, assistant physicians) might have spent as little as three months or as long as three years at any of these specialist hospitals.

As would be expected, the National Hospital provided the highest number of appointments for this group. In total, 93 positions were available to this group. However, some held more than one of these. Consequently, 27 never held an appointment at any. Of this group, one or more of the following conditions might have been determinant: 15 trained outside of London and never worked there. 7 held posts in related specialties or were medically qualified pathologists and physiologists. 5 qualified in medicine before 1916. 5 held Professorships in provincial medical schools. 2 practiced in Ireland. 1 was foreign-trained. 1 was a woman.

The only woman appointed to the National Hospital in the group analyzed here was Marion Smith (1915-1988). She worked with Edward Carmichael in the Clinical Neurological Research Unit at Queen Square. Helen Dimsdale was Consultant neurologist at Maida Vale Hospital. Dorothy Russell was a Neuropathologist at the London Hospital, while Honor Smith worked in Oxford.

Chart C13 – Decade of Appointment at the National Hospital

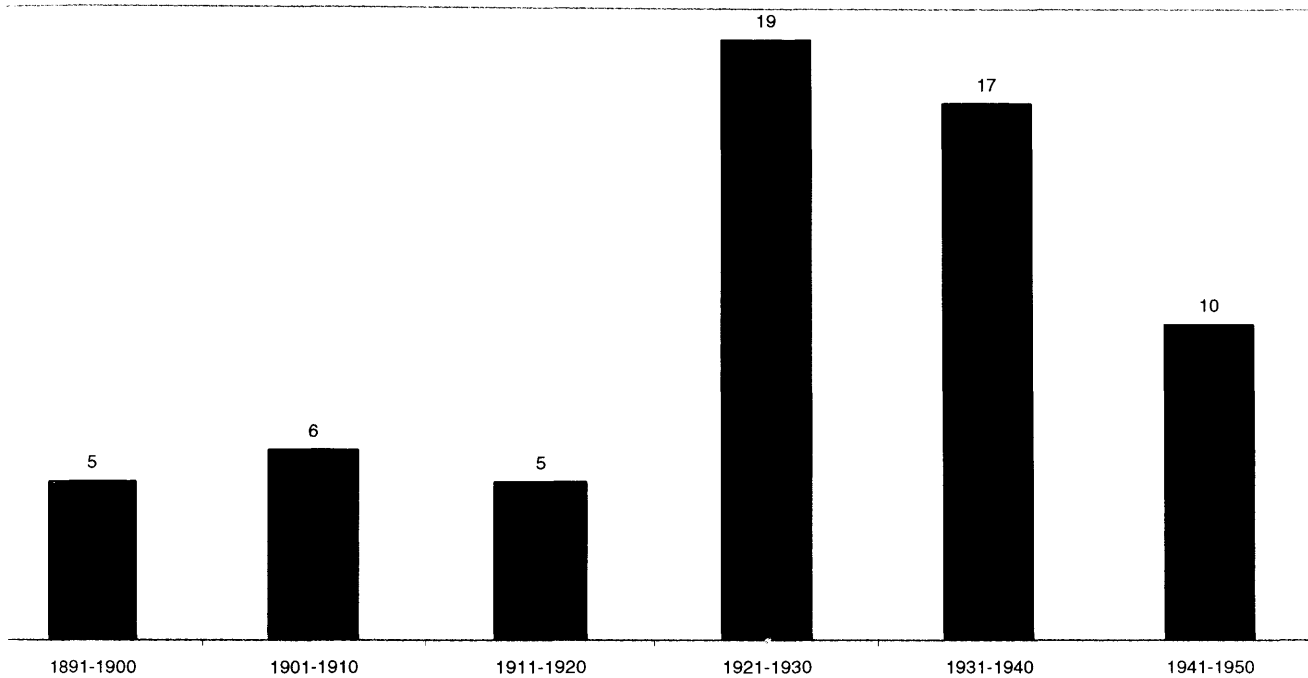


Chart C13: Before 1920, the number of positions available at the National Hospital was substantively less than in the interwar period. 74% of the total appointments in this group occurred between 1920 and 1950. This reflects increases in the size of the hospital and number of available beds, as well as the increases in research and teachings posts.

Chart C14 – Educational Origins of Individuals at the National Hospital

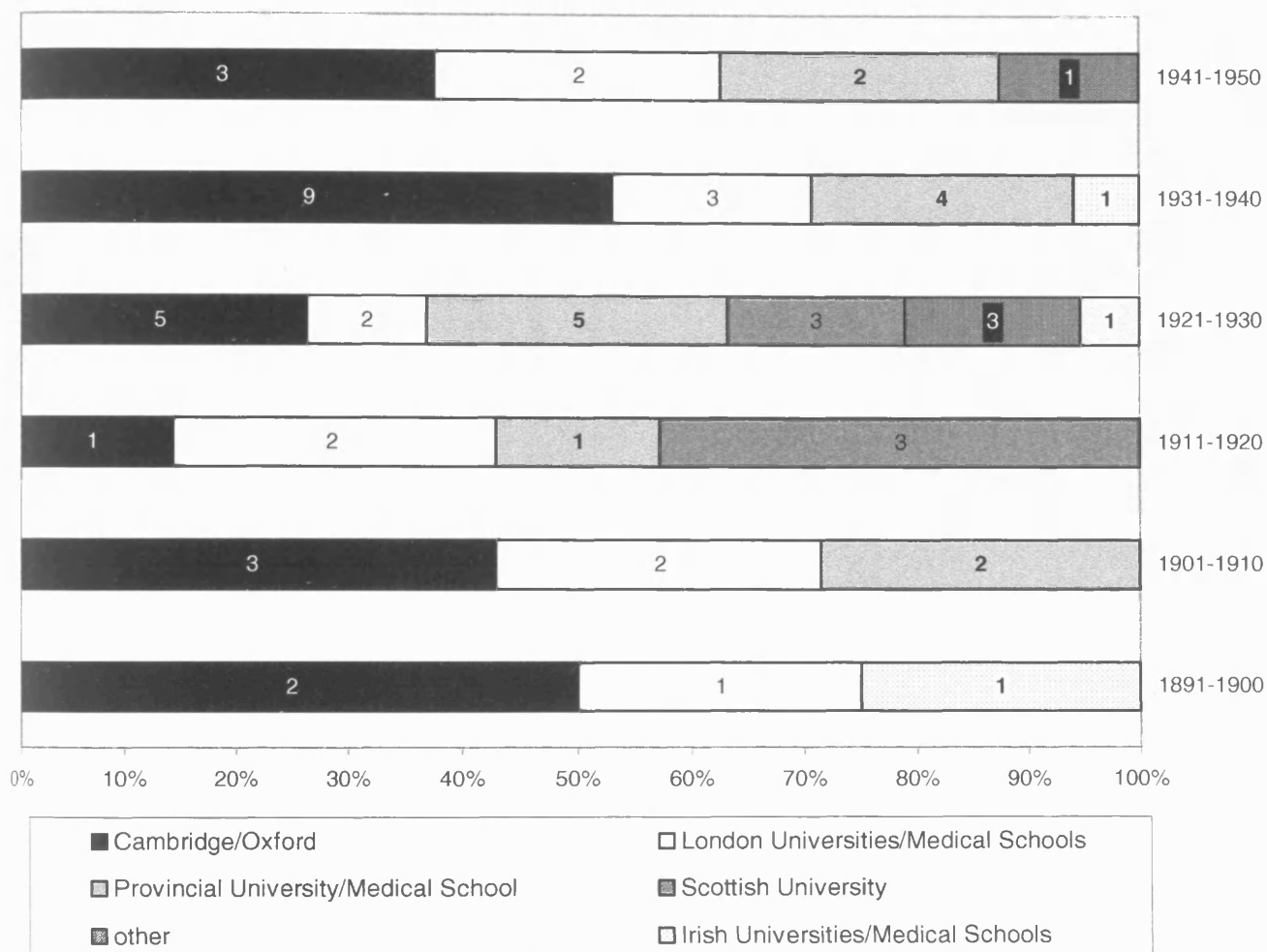


Chart C14: These data do not allow critical analysis. As in Chart C7, the data here reflect institutions at which the first-degree or/and medical qualification was awarded.

Table C4 – Comparative Statistics, 1949-1957

Date	General Medicine	Diseases of the Chest	Mental Health	Neurology	Paediatrics	Radiology	Radiotherapy	Physical Medicine	Pathology	Infectious Diseases	Dermatology	Venereology	Ophthalmology	General Surgery	Anaesthetics	Neurosurgery	Plastic Surgery	Thoracic Surgery	Orthopaedic Surgery	Ear, Nose and Throat Surgery	Obstetric and Gynaecology	Totals
1949	755	216	449	53	166	327	85	49	495	50	127	89	331	927	496	37	30	49	252	312	424	5719
1950	831	250	504	53	202	378	93	57	526	52	136	101	341	942	602	39	32	57	269	328	439	6232
1951	857	266	532	59	208	400	101	61	541	48	135	99	342	948	655	42	33	66	293	341	449	6476
1952	904	310	566	61	214	414	108	70	581	51	142	97	351	986	714	44	36	81	320	339	473	6862
1953	905	340	595	67	222	436	112	75	631	60	145	94	342	982	748	46	43	89	328	346	473	7079
1954	924	344	616	68	226	447	116	74	646	59	146	93	340	987	782	48	48	91	335	350	485	7225
1955	932	346	633	69	228	455	120	73	659	58	146	93	341	988	797	49	50	93	339	353	493	7315
1956	946	347	640	70	229	468	127	77	689	56	150	92	339	988	815	52	50	97	353	347	495	7427

Table C4: The Ministry of Health published survey statistics throughout the 1950s. (No comprehensive survey data exists for the period before this.) The data here are limited for two reasons: they reflect consultant appointments only and individuals appointed to more than one specialty are counted twice. The Committee on Neurology viewed the apparent increase in neurologists and neurosurgeons sceptically and suggested that some neurosurgeons were being appointed as specialists in both neurology and neurosurgery. No evidence was provided to support this allegation. Still it is interesting to note the difference between Mental Health and Neurology. On average, the Ministry created approximately 11 new positions in Mental Health for every 1 it added for neurology. The increase in General Medicine and Mental Health, by contrast, were proportionally similar, suggesting that some increases in specialist numbers were disproportionately less relative to general medicine. (See: 'Number of Consultants per Specialty, *The Lancet* (1957), p. 785.)

[illegible]

Table C5 – Employment

	Liversidge, L A		Empire Hospital
	Lloyd, G H T		General Infirmary Leeds
	Lyle, T K S		Great Northern Hospital
	Mackenzie, I C K		Great Ormond Hospital for Sick Children
	Martin, J P		Guy's Hospital
	McAlpine, D		Hampstead General Hospital
	McArdle, M J F		Hardwicke Hospital, Dublin
	McMenemy, W H		Herts and Esse1 Hospital
	Meadows, S P		Hospital for Tropical Diseases
	Miller, H G		King Edward VII Hospital Windsor
	Nettrass, F J		King's College Hospital
	Nevin, S		LCC General Hospitals
	Parsons-Smith, B G		Liverpool Royal Infirmary
	Penman, J		Maida Vale Hospital for Nervous Diseases
	Phillips, C G		Manchester Royal Infirmary
	Porter, R J		Maudsley Hospital
	Pratt, R T C		Mercer's Hospital
	Pritchard, E A B		Metropolitan Hospital
	Purser, F C		Middlese1 Hospital, London
	Rees, W E		Moorfields Hospital
	Riddoch, G		Mount Vernon Hospital
	Robertson, E G		National Hospital, Queen Square
	Russell, D S		North and South Teesside Hospital
	Russell, W R		Oxford Head Injuries Centre
	Sandifer, P H		Oxford United Hospital
	Smith, H M V		Pensions Hospital at Mossley Hill
	Smith, M C		Pensions Hospital Hammersmith
	Smyth, G G E		PG Medical School Hammersmith
	Splaine, J D		
	Stanton, J B		
	Stewart, T G		
	Symonds, C P		
	Turner, J W A		
	Waisie, F M R		
	Wells, C E C		
	Whitridge, D		
	Whitty, C W M		
	Williams, D J		
	Wilson, S A K		
	Woster-Drought, C C		
	Wylie, W G		

Table C5 – Employment

	St Albans Hospital
	St Andrew's Hospital
	St Bartholomew's Hospital
	St Francis's Hospital, Kent
	St Hugh's Hospital
	St James Hospital, Leeds
	St Thomas' Hospital
	St. Georges' Hospital
	St. Mary's Hospital
	St. Olav's Hospital
	Stoke Mandeville
	Swansea and West Wales Hospitals
	Swansea General and Eye Hospital
	The London Hospital
	The Westminster Hospital
	University College Hospital
	Victoria Infirmary
	Warrington General Hospital
	Wembley Hospital
	Wessex Regional Hospital
	West End Hospital for Nervous Disease
	West London Hospital
	Western Infirmary, Glasgow
	Western Ophthalmic Hospital
	Whittington Hospital
	Whitworth Hospital, Dublin
	Worcester Royal Infirmary
	Wrexham Hospital
Adie, W J	
Adrian, E D	
Allison, R S	
Astley, C E	
Barnes, A S	
Bates, J A V	
Behman, S	
Biggart, J H	
Birley, J L	
Brain, W R	
Bramwell, E	
Brinton, D H	
Brown, T G	
Bull, J W D	
Buzzard, E F	
Campbell, A M	
Carmichael, E A	
Carson, J	
Carter, A B	
Clarke, E S	
Cloake, P C P	
Cohen, H	
Collier, J S	
Cook, J B	
Core, D	
Corseilis, J A N	
Critchley, M	
Croft, P B	
Cummings, J N	
Denny-Brown, D E	
Dimsdale, H	
Dixon, G J	
Downie, A W	
Duchen, L W	
Edwards, C H	
Elkington, J St. C	
Felling, A	
Ferguson, F R	
Garland, H G	
Gilliat, R W	
Golla, F L	
Gordon, R G	
Graveson, G S	
Greenfield, J G	
Guest, I A	
Gutman, L	
Hall, G	
Hall, G S	
Hallpike, C S	
Harris, W J	
Henson, R A	
Hinds Howell, C M	
Holmes, G M	
Hulbert, N G	
Ironside, R N	
Jewesbury, E C O	
Johnson, W	
Kelly, R E	
Kremer, M	

Table C5 – Employment

Table C4: This data presents hospitals where individuals are known to have worked. There are various limitations: They reflect neither the hospital grade nor chronology of the appointments. Appointments in the larger hospitals were initially at the lowest grade. After house and registrar appointments etc., the individual might be hired within the hospital – in which case rapid promotion was typical. Otherwise, the individual would hold several appointments at different hospitals, usually obtaining a post as a consultant much later. Neither route seems to have reflected lack of competence in practice, because there were an equally large number of prominent figures in neurology in either subset. Probably route of career path reflected availability of positions. The increase in neurological appointments in the 1920s and 1930s meant that comparatively more individuals moved into the hospital ranks than in the period before or during the 1940s. Similarly, many appointments were made outside London in the 1950s as the Health Service expanded the numbers of practicing specialists throughout the country. Thus, individuals qualifying in the late 1930s and 1940s often moved from lower graded posts in London to take up positions in the provinces in the 1950s. *Note: Many hospitals changed their name throughout this period. Though I have attempted to be consistent here, some hospitals may be represented more than once.*

Chart C15 – Employment in General Hospitals

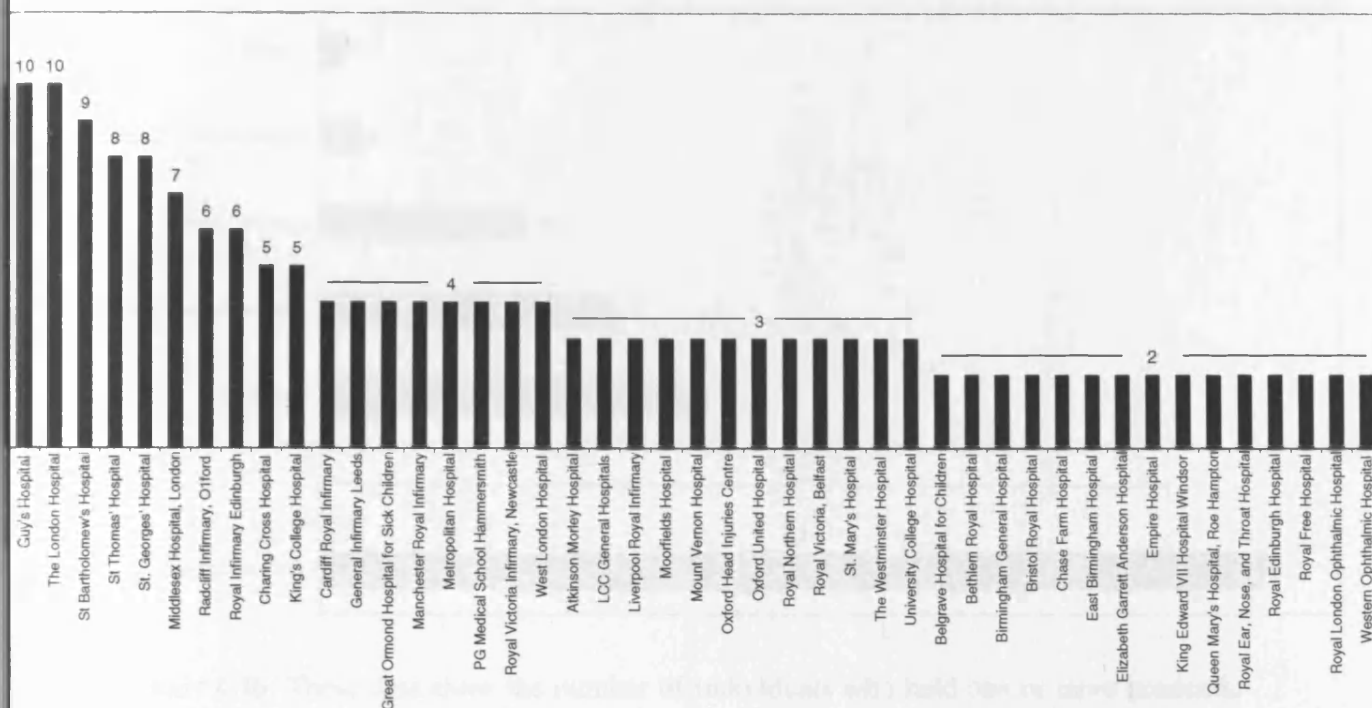


Chart C15: A considerable proportion of the available appointments were in London. In total 23 of the 45 hospitals presented here were in the Capital: 110 (64%) of the 172 appointments shown. However, this is slightly misleading as not all hospital appointments are represented in this chart. Not including specialist hospitals, there were 107 hospitals in this study, of which 62 hired one individual. Thus the total number of appointments in general hospitals was 235. Of those, 30 hospitals were in London for 117 appointments or approximately 50%. *Note that any individual may be included in more than one category; no individual appears more than once in a single category.*

Chart C16 – Academic Appointments in Universities or Medical Schools

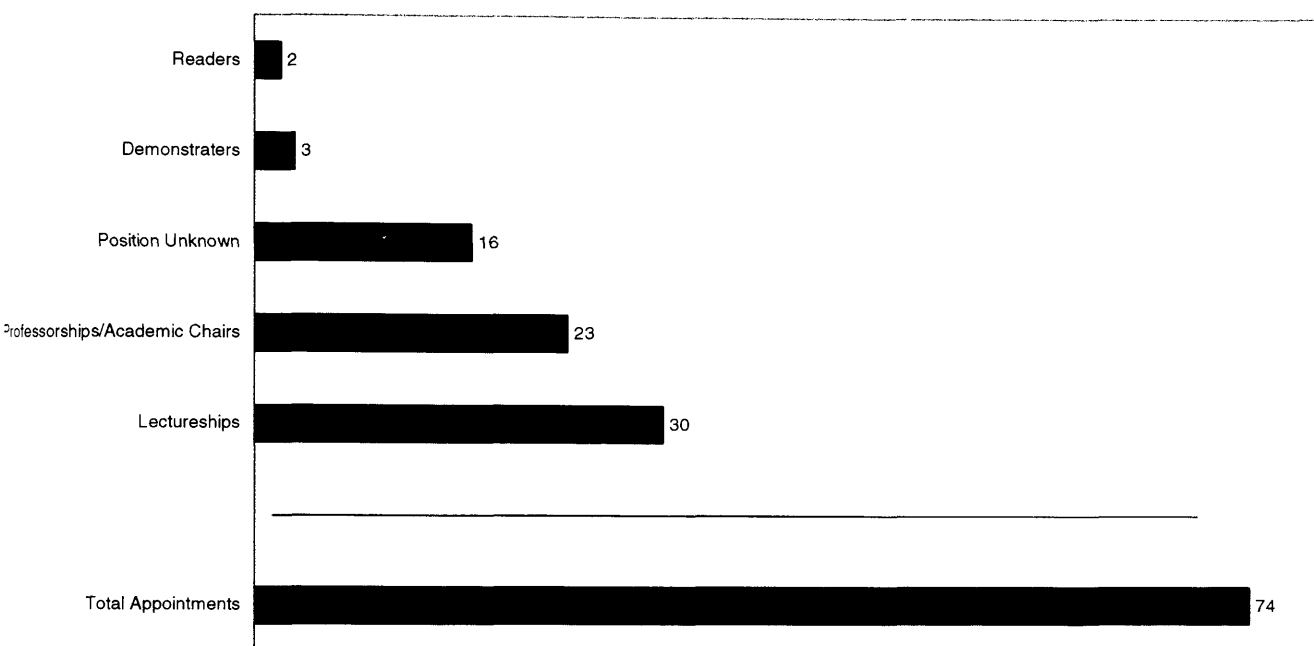


Chart C16: These data show the number of individuals who held one or more academic appointments. Those who held more than one academic appointment are shown only once, with two exceptions: when Philip Cloake retired as Professor of Medicine at Birmingham, he was asked to take up a Personal Chair in Neurology. Francis Carmichael Purser (Dublin) held two professorships at different Universities simultaneously. Occasionally, academic appointments or teaching ability were described without further delineation (described as position unknown here).

Chart C17 – Professorships

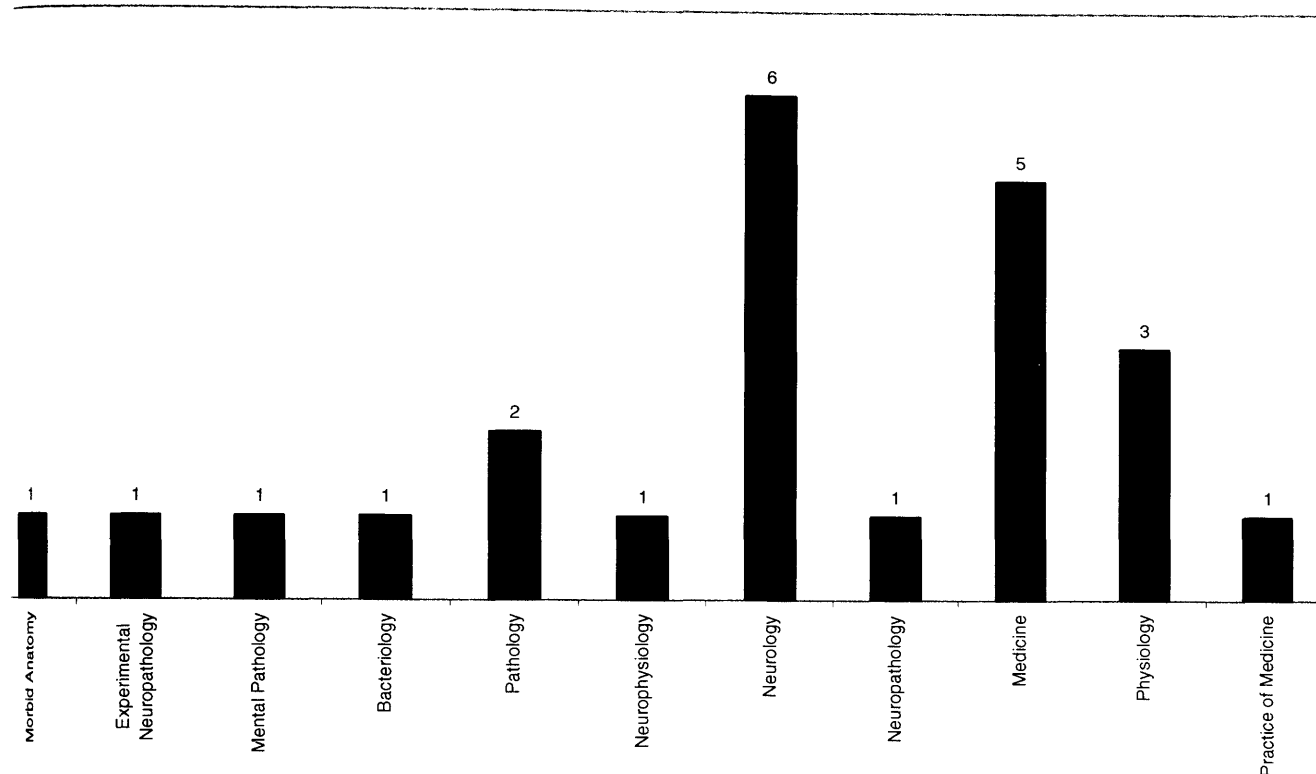


Chart C17: The individuals in this study held diverse Professorships. (Dates are unknown if not otherwise specified.) Dorothy Russell was made Professor of Morbid Anatomy in 1946 at Oxford. This was with Hugh Cairns, who held the First Nuffield Professorship in Neurosurgery (not shown). Leo Duchon was Professor of Experimental Neuropathology in the University of London. Samuel Nevin was appointed Professor of Mental Pathology in University College London. Allan Downie held the Chair of Bacteriology at Liverpool University. John Henry Biggart was appointed Professor of Pathology at Queens University in 1937. William McMenemy was appointed Professor of Pathology in the Institute of Neurology in 1965. Charles Philips was given the Chair of Neurophysiology at Trinity College in 1946. Roger Gilliatt was appointed Professor of Neurology at the National Hospital sometime in the 1950s. William Ritchie Russell was appointed Professor of Neurology at Oxford in 1966. He retired in 1970. Derek Denny Brown was appointed James Jackson Putnam Professor of Neurology at Harvard in 1946, a position he held until 1967. Henry Miller became Professor of Neurology at Newcastle in the 1964. Francis Walshe was appointed to the First Chair of Neurology at University College Hospital in 1925. Philip Cloake was Professor of Medicine at Birmingham from 1933 until 1946. When Cloake retired he was asked to become Honorary Professor of Neurology (1947-1955). Francis Carmichael Purser held an Honorary Professorship in Neurology at Dublin University and was also King's Professor of the Practice of Medicine at Trinity College, Dublin. Edward Farquhar Buzzard was Regius Professor of Medicine at Oxford from 1928 until 1943. Edwin Bramwell was Moncrieff-Arnott Professor of Clinical Medicine at Edinburgh University from 1922 until 1934. Henry

Cohen was made Professor of Medicine at Liverpool in 1934. Frederick Nattrass was made Professor of Medicine at Newcastle in 1941. John Corsellis was appointed to the Chair of Neuropathology at the Institute of Psychiatry. Thomas Graham Brown was Professor of Physiology at the Welsh National School of Medicine in Cardiff. He was subsequently appointed Waynflete Professor of Physiology there in 1968. David Whitteridge became Professor of Physiology at Edinburgh University in 1950. E D Adrian was Foulerton Research Professor of the Royal Society from 1929 to 1937. He was subsequently appointed Professor of Physiology at Cambridge from 1937 to 1951, when he resigned to become Master of Trinity, a position he held until 1965. He then became Chancellor of Cambridge. Two additional figures not reflected here are worth noting. Edwin Clarke changed his career and became an historian of medicine, and subsequently held a brief Professorship at Yale University. David Kennedy Henderson was Professor of Psychiatry at Edinburgh University.

Chart C18 – Administrative Appointments in Universities or Medical Schools

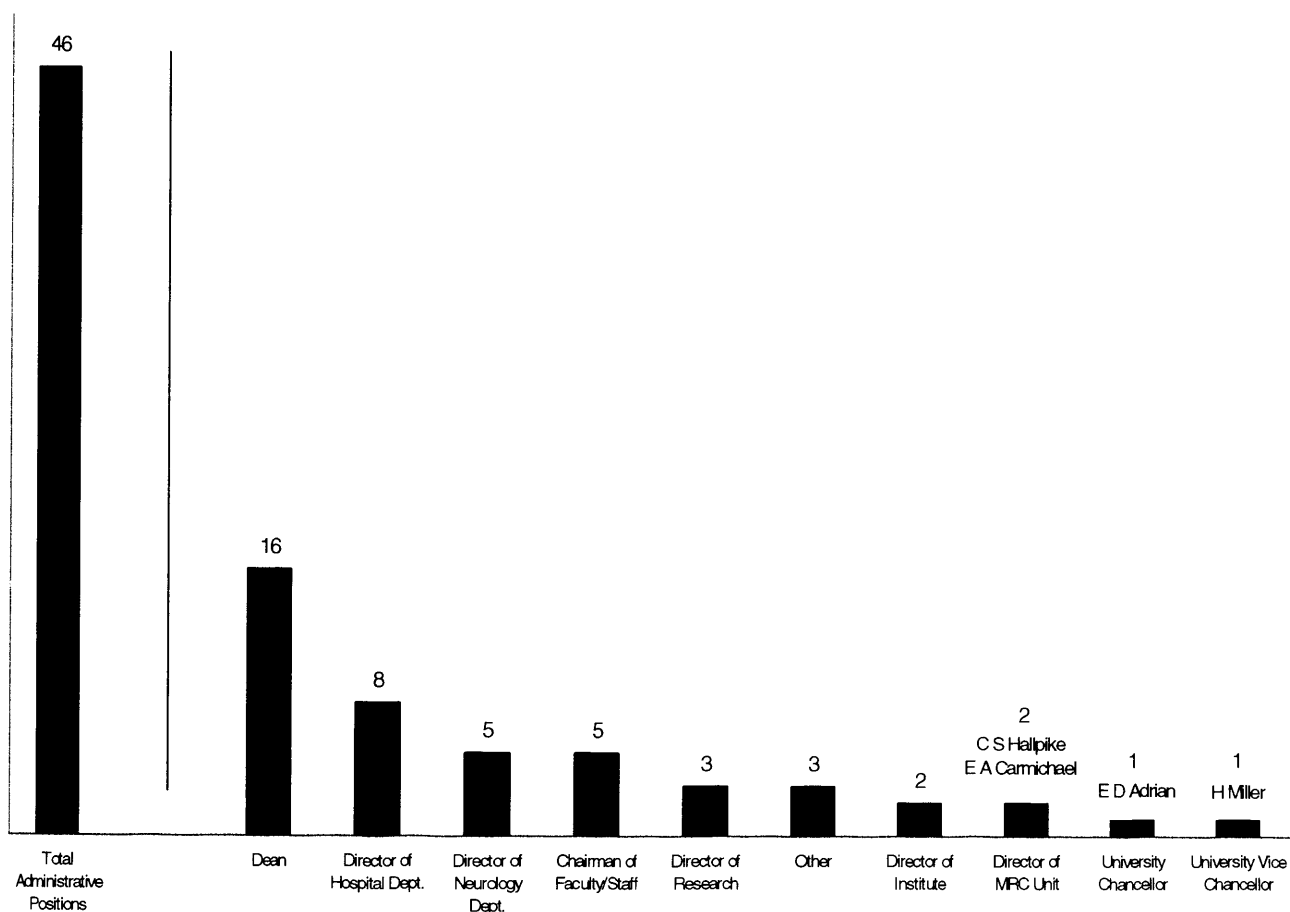


Chart C18: 36 individuals in this study held administrative positions. Of the deanships, seven were in specialist hospitals (six at the National Hospital and one at Maida Vale). The remainder were in London Teaching Hospitals (three), provincial medical schools (five), and research institutes (one). As Chapter 2 described, departments of neurology were uncommon until the 1920s. The earliest appointment was Wilfred Harris's at St Mary's Hospital. However, it was Samuel Alexander Kinnier Wilson's 1919 appointment as Director of Neurology Department at King's College that marked the point when medical schools and universities began creating these departments. (Note that Derek Denny Brown's appointment at Boston City Hospital, as Director of Neurology, is included here.) The positions included in 'other' are E D Adrian's appointment as Master of Trinity College, J B Stanton's appointment as Edinburgh College Secretary, and R S Allison's appointment as Secretary to the Medical Staff at Royal Victoria Hospital, Belfast. Frederick Golla succeeded Frederick Mott as Director of the Central Pathological Laboratory at the Maudsley, and he subsequently became Director of the Burden Neurological Research Institute in 1938. Dorothy Russell was Director of the Bernhard Baron Institute of Pathology. Unquestionably, the most prestigious positions were E D Adrian's Chancellorship of Cambridge University and Henry Miller's Vice-Chancellorship at Newcastle.

Chart C19 – Military Service

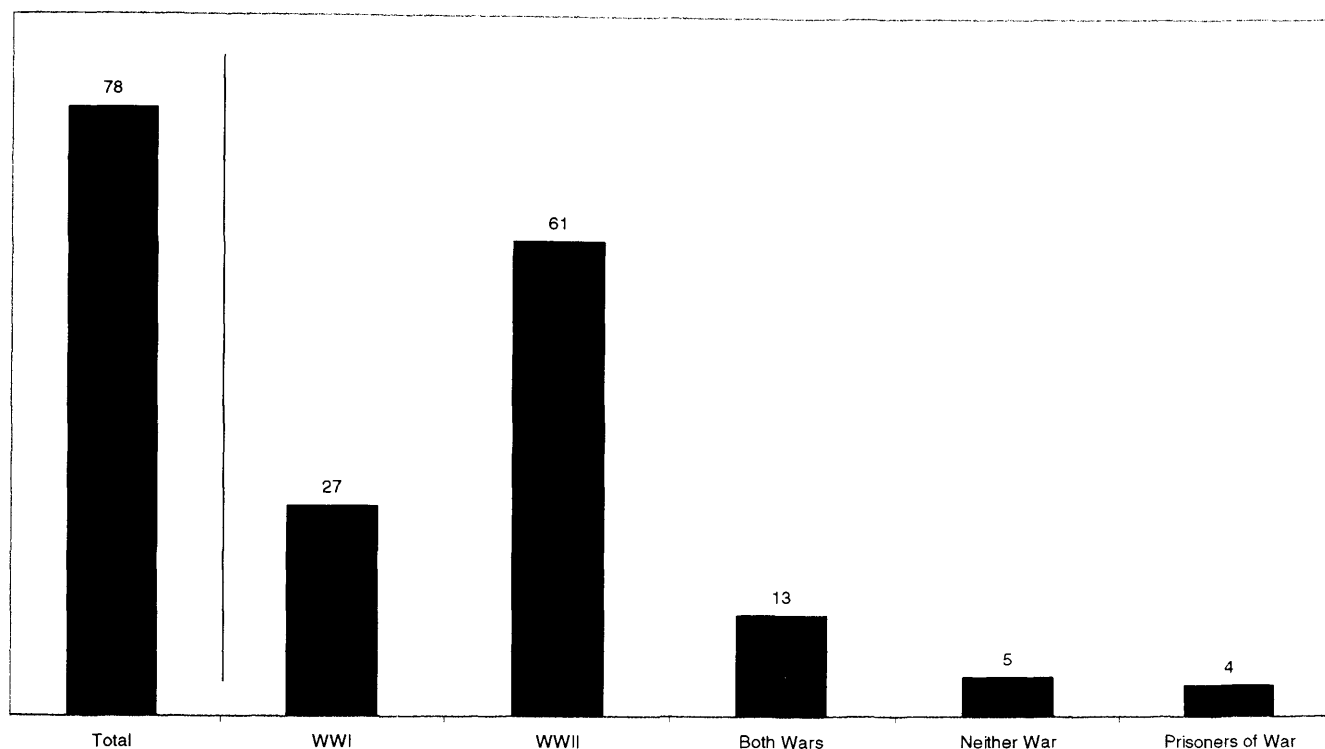


Chart C19: Chapter 4 described how the social and cultural conditions of total war changed medical self-perception. Chapter 7 explored how World War II was significant in prompting the emergence of a regionalised neurological health service. More than 75% of these individuals were in the armed forces, an unsurprising fact given the period. Most – though not all – were in the medical corps. 29 of the individuals in this study qualified in medicine before 1920. Consequently, 93% of those qualifying before 1920 served in World War I. Only two who qualified before 1920 seem not to have served: Samuel Alexander Kinnier Wilson and James Godwin Greenfield. In letters to his wife, Foster Kennedy recorded how several of Kinnier Wilson's contemporaries complained that he 'plundered' their private practices during the war. This may explain why some held him in general contempt during the interwar period. Of Greenfield's lack of service, nothing is known. Four individuals in this group were prisoners of war. Frederick Nattrass during World War I, and James William Doyle Bull, George Geoffrey Evanson Smyth, and Charles Edward Cecil Wells during World War II. Only one, Walter Russell Brain, is known to have been a conscientious objector. Brain worked at the Quaker Ambulance Hospital in York during the First World War.

Chart C20 – Professional Capital

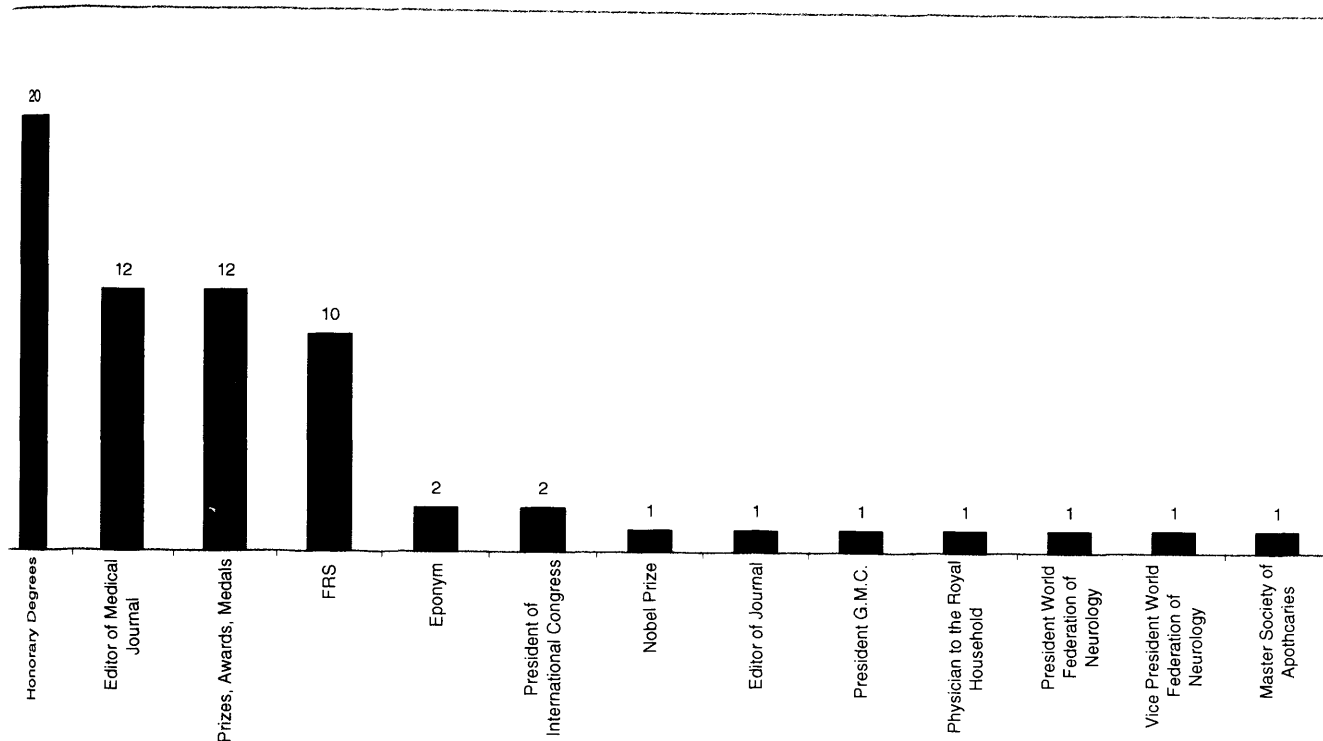


Chart C20: Professional capital is understood here as indicators of professional prestige. Honorary degrees may be taken only loosely as evidence of prestige. Many in this group were awarded more than one. Not surprisingly, E D Adrian, the Nobel Prize winner in this group, was awarded 29 such degrees. Editors of Medical Journals have particular advantages within specialist fields. Not only do they determine what is publishable, they can act as advocates for their own students, Laboratory, or Research Unit. A list of editors of *Brain – a Journal of Neurology* is provided in Appendix A (List A3). Samuel Alexander Kinnier Wilson, Edward Arnold Carmichael, William Ritchie Russell were Editors of the *Journal of Neurology and Psychopathology* (published under different titles after 1937, see chapter 2). Anthony Feiling was editor of *Modern Trends in Neurology*, Hugh Garland was editor of the *Leeds Medical Journal*, Ludwig Guttmann was editor of *Paraplegia*, and James Purdon Martin was editor of the *Journal of Neurology*. Professional prizes, awards, and medals are arbitrary indicators of prestige. Though they represent a form of professional recognition, such recognition was never given to these individuals without other indicators of professional status. Unquestionably, Fellowship in the Royal Society was the highest scientific honour given in Britain in this period. E D Adrian (1923), W R Brain (1964), T G Brown (1927), A W Downie (1955), L Guttmann (1976), C S Hallpike (1956), G M Holmes (1933), C G Phillips (1963), F M R Walshe (1946), and D Whitteridge (1953) became fellows. Eponyms in neurology may be regarded as professionally significant. Koehler, Bruyn, and Pearce regarded them as important enough to publish an entire monograph devoted to the subject *Neurological*

Eponyms (2000). Only two individuals in this study, William John Adie and Samuel Alexander Kinnier Wilson, have conditions named after them. Adie's syndrome is a controversial eponym – Charles Symonds and Gordon Holmes both identified the syndrome at about the same time. Kinnier Wilson provided his description of hepatolenticular degeneration in his 1911 M.D. thesis. Two individuals were Presidents of International medical congresses. G Holmes was President of the 1935 International Neurological Congress and F Nattrass was President of the 3rd International Congress on Muscle Disease. T Graham Brown was editor of *Alpine*, a mountaineering journal. H Cohen was President of the General Medical Council in 1961. E F Buzzard was Physician Extraordinary to the King in 1924 and Physician in Ordinary to the King in 1932. E G Robertson was Vice President of the World Federation of Neurology, though he was then living in Australia. Macdonald Critchley was President of the World Federation of Neurology. T K Lyle was Master of the Society Apothecaries. It is important that there are other forms of professional capital. Three of the individuals in this study were the sons of 'pioneers' in the field. E F Buzzard's father was Thomas, Edwin Bramwell's father was Byrom, and J W A Turner's father was William Aldren Turner.

Chart C21 – Service in the Royal Colleges

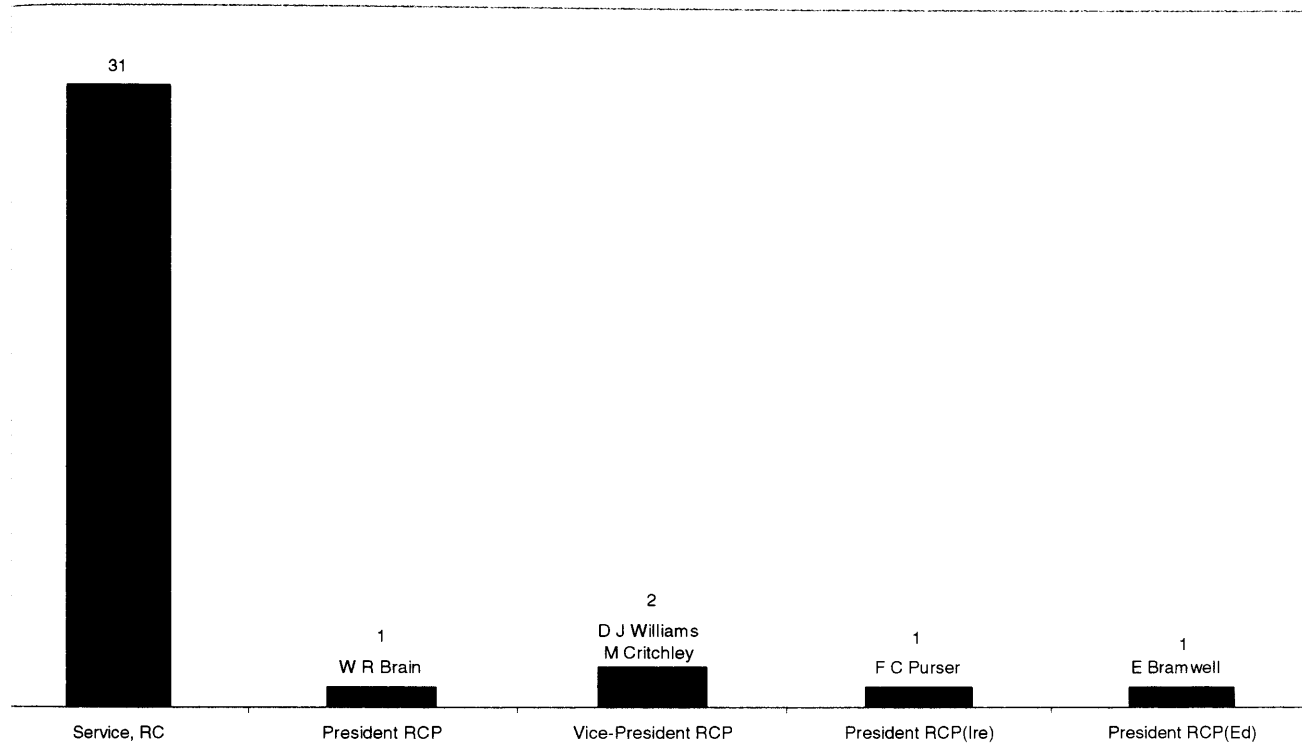


Chart C21: Many in this group held various positions within the various Royal Colleges. Appointments included censor, examiner, council, and committees. *Some individuals are included in more than one category.*

Chart C22 – Positions in Government Ministries or Councils

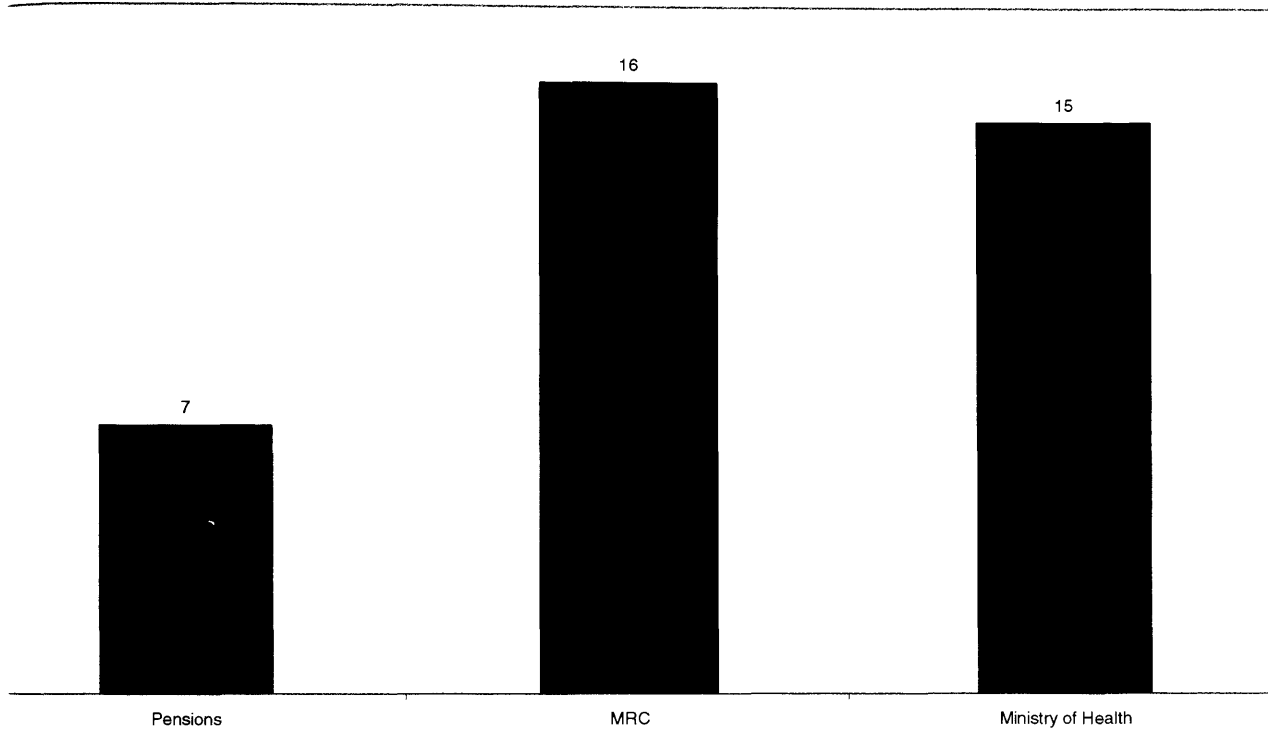


Chart C22: In Britain, positions on government committees are indicative of professional and social power. In general, the appointments to Pensions occurred in the 1920s, while appointments with the MRC and the Ministry of Health were more random. *Some individuals are included in more than one category.*

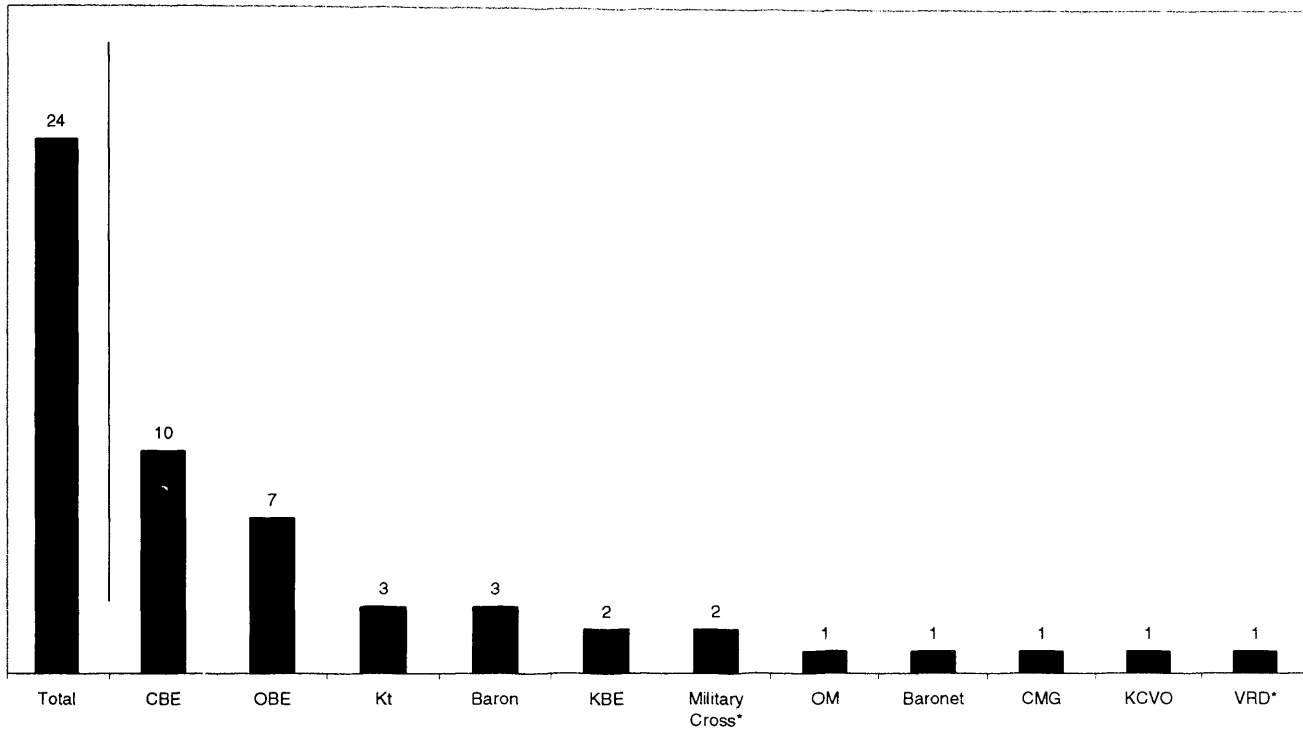
Table C6 – Presidencies of Medical and Scientific Societies

President RSM Section of Neurology	28
President ABN	22
President Association of Physicians	5
President BMA Neurology and Psychology Section	3
President Electroencephalography Society	3
President League Against Epilepsy	3
President RSM Section of Clinical Medicine	3
President RSM Section of Psychiatry	3
BMA President	2
President Association of Clinical Pathologists	2
President North of England Neurological Association	2
BMA President Section of Neurology	1
Medical Research Adviser, Multiple Sclerosis Society	1
President Australian Association of Neurologists	1
President BAAAS	1
President British Society of Neuroradiologists	1
President International Medical Society on Paraplegia	1
President Irish Medical Association	1
President Leeds and West Riding Medico-Legal Association	1
President Liverpool Medical Institution	1
President Medical Society of London	1
President Midland Medical Society	1
President Neuropathological Society	1
President of European Society of Neuroradiologists	1
President of the British Orthoptic Board	1
President Royal Medical Association	1
President RS	1
President RSM Section of Paediatrics	1
President RSM United Services Section	1
Royal Society of Medicine President	1
President World Federation of Neurology	1

Table C6: Presidencies in scientific and medical societies. E F Buzzard and H Cohen were Presidents of the BMA. R S Allison, Buzzard, W R Brain, H Miller, and Natrass were Presidents of the Association of Physicians. E D Adrian was President of the Royal Society (RS) and the British Association for the Advancement of Art and Science (BAAAS). Francis Walshe was President of the Royal Society of Medicine. Macdonald Critchley was President of the World Federation of Neurology. *Some individuals are included in more than one category.*

Chart C23 – Social Distinction

Chart C23: Royal bestowal of knighthood indicates civil and therefore social distinction.



Baron, Baronet, OM, KCVO, Kt, KBE are high distinctions, while CBE, OBE, and CMG are lower distinctions. 21 individuals held some royal distinction, while three held military distinctions. The Military Cross is awarded for courage in battle, while Volunteer Reserve Decoration (VRD) is awarded for twenty years of Naval service. Neither are royal distinctions, but both allow the medal's initials to be placed after the name. Three individuals in this group were raised to the peerage: E D Adrian, W R Brain, and H Cohen. E F Buzzard was KCVO and then Baronet. Gordon Holmes was CMG. It should be noted that there are other forms of social distinction, though less tangible. For example, Anthony Feiling, as a child, was depicted as one of the characters in Kenneth Graham's *The Wind and the Willows*. *Note that individuals may appear in more than one category.*

	Antiques	Archaeology	Architecture	Art	Ballet	Billiards	Bird Watching	Boating	Bridge	Cars	Cast Iron	Cooking	Cricket	Cybernetics	Dancing	Demonology	Farming	Fencing	Fishing	Fly-fishing	FoX Hunting	Gardening	Golf	History	Jade
Meadows, S P																									
Miller, H G																									
Nattrass, F J																									
Nevin, S							X																		
Parsons-Smith, B G																									
Penman, J																									
Phillips, C G																									
Porter, R J																									
Pratt, R T C																									
Pritchard, E A B																									
Purser, F C																									
Rees, W E																									
Riddoch, G																									
Robertson, E G										X															
Russell, D S																									
Russell, W R																									
Sandifer, P H				X						X															
Smith, H M V																									
Smith, M C																									
Smyth, G G E																			X						
Spillane, J D																									
Stanton, J B															X										
Stewart, T G																									
Symonds, C P																				X					
Turner, J W A																									
Walshe, F M R																									
Wells, C E C							X																		
Whitridge, D																									
Whitty, C W M																	X								
Williams, D J																									
Wilson, S A K																					X		X		
Worster-Drought, C C			X																						
Wyllie, W G	X						X																		

Table C7 – Hobbies

		Languages	Literature	Medical History	Mountaineering	Music	Pets	Philatelist	Photography	Racing	Riding	Sailing	Samuel Johnson	Shooting	Skating	Spoon Collecting	Sports	Squash	Sundials	Tennis	Theatre	Traveling	Unknown	Walking	Wild Flowers	Writing
	Adle, W J	X																								
	Adrian, E D																									
	Allison, R S					X														X	X			X		
	Astley, C E																									
	Barnes, A S																									
	Bates, J A V	X																								
	Behrman, S		X																							
	Biggart, J H																									
	Birley, J L																									
	Brain, W R		X																							
	Bramwell, E																									
	Brinton, D H																									
	Brown, T G				X																					
	Bull, J W D																									
	Buzzard, E F																									
	Campbell, A M			X																						
	Carrickrae, E A																									
	Carson, J								X																	
	Carter, A B																									
	Clarke, E S																									
	Cloake, P C P		X																							
	Cohen, H																									
	Collier, J S						X																			
	Cook, J B																									
	Core, D																									
	Corsellis, J A N																									
	Critchley, M	X																								
	Croft, P B																									
	Cummings, J N								X																	
	Denny-Brown, D E																									
	Dimsdale, H																									
	Dixon, G J																									
	Downie, A W																									
	Duchen, L W																									
	Edwards, C H																									
	Elkington, J St. C																									
	Felling, A																					X				
	Ferguson, F R																									
	Garland, H G																									
	Gilliant, R W		X																							
	Golla, F L																									
	Gordon, R G																									
	Graveson, G S																									
	Greenfield, J G																									
	Guest, I A																									
	Gutman, L																									
	Hall, G					X																				
	Hall, G S																									
	Halpikie, C S					X																				
	Harris, W J																									
	Henson, R A					X																				
	Hinds Howell, C M																									
	Holmes, G M																									
	Hulbert, N G																									
	Ironside, R N					X																				
	Jewesbury, E C O							X																		
	Johnson, W																									
	Kelly, R E																									
	Kremer, M											X														
	Liversedge, L A																									
	Lloyd, G H T												</													

Table C7 – Hobbies

	Languages	Literature	Medical History	Mountaineering	Music	Pets	Philatelist	Photography	Racing	Riding	Sailing	Samuel Johnson	Shooting	Skating	Spoon Collecting	Sports	Squash	Sundials	Tennis	Theatre	Traveling	Unknown	Walking	Wild Flowers	Writing
Meadows, S P		X			X																X				
Miller, H G		X																							
Natras, F J					X																				
Nevin, S																									
Parsons-Smith, B G																									
Perman, J	X	X																							
Phillips, C G																									
Porter, R J										X															
Pratt, R T C			X																						
Pritchard, E A B																									
Purser, F C																									
Rees, W E																							X		
Riddoch, G		X																							
Robertson, E G							X																		
Russell, D S					X																				
Russell, W R																						X			
Sandifer, P H					X																				
Smith, H M V																									
Smith, M C						X																			
Smyth, G G E											X														
Spillane, J D		X																							
Stanton, J B		X																							
Stewart, T G																									
Symonds, C P																									
Turner, J W A									X																
Walshe, F M R																									
Wells, C E C										X															
Whitridge, D			X																						
Whitty, C W M		X																							
Williams, D J																									
Wilson, S A K																									
Worster-Drought, C C																X									
Wylie, W G																									

Table C7 – Hobbies

Chart C24 – Hobbies

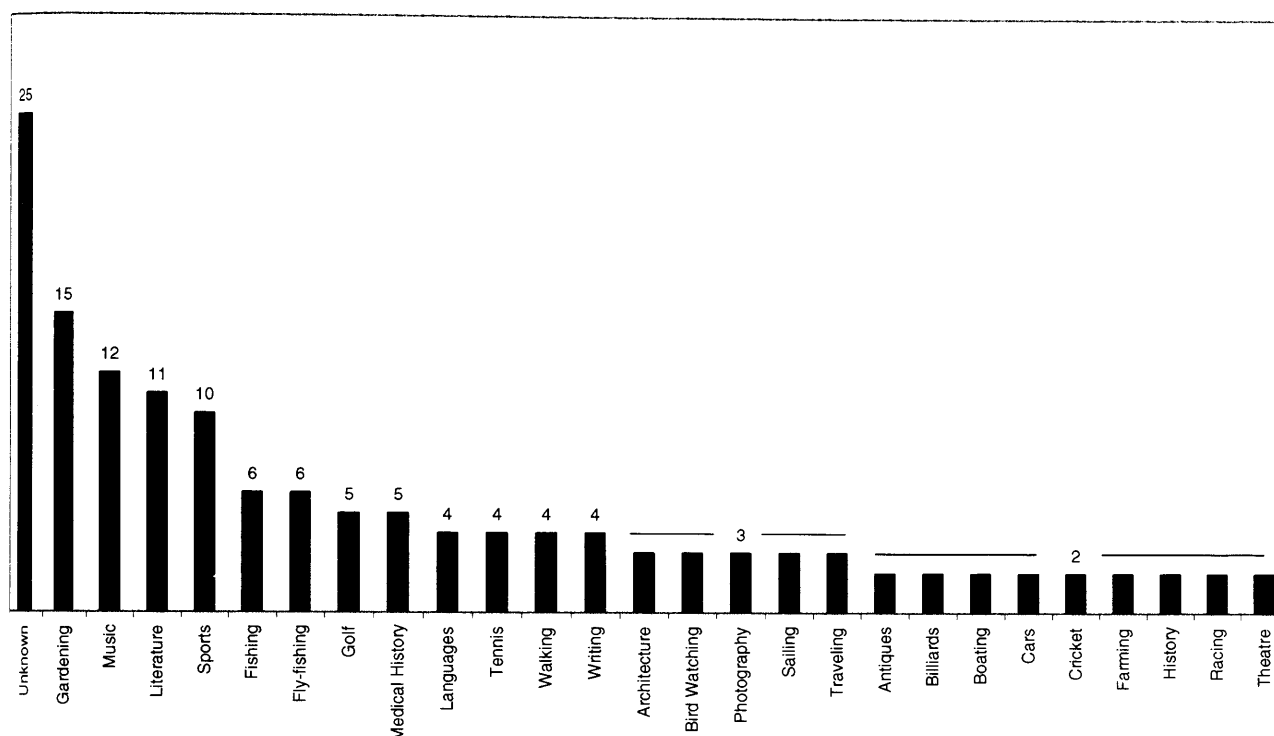


Table C7 and Chart C24: Very little information on non-professional interests is available in biographical or autobiographical sources. Even longer biographies tend to focus on the professional rather than the personal, leaving little sense of the individual's private life and personal achievements. When mention is made of private interests, the perfunctory status of hobbies and personal interests in sources like obituaries and Munk's Roll is interesting. Much may be revealed in these final epithets. They may signal wealth or a value of high culture, or they may be euphemisms for eccentricities or poor 'taste'. It is interesting, for example, that only ten were labelled as being interested in 'sports', while others were interested in 'cricket', 'golf', 'tennis', and 'rugby'. The difference seems to be participation as opposed to enthusiasm. Hobbies may also point to general social trends. While 'gardening' was generally popular throughout the group, 'fly-fishing' and 'walking' were almost exclusively the hobbies of individuals qualifying before 1920. 'Medical history' was popular with physicians qualifying after 1930.

Hobbies may be part a critical part of self-fashioning the individual. Many individuals in this study saw themselves as polymaths and even sometimes published on their hobbies. E G Robertson was an expert on cast iron, P C P Cloake, on Jade, W Harris was an expert on antique silver spoons, and R T C Pratt had an extensive collection of sundials. Another example, though not appearing in this study, would be William Gooddy. Gooddy was expert tile maker and had an arts-and-crafts-like obsession with typesets and printing presses.

Table C8 – Record of Marriage

Married	No Record of Marriage
87	13

Table C8: Those married had on average two children. There was no mention of children born to those who remained unmarried.

Appendix D – 1931 First International Neurological Congress, Bern

The information below is supplemental to the discussion in Chapter 6.

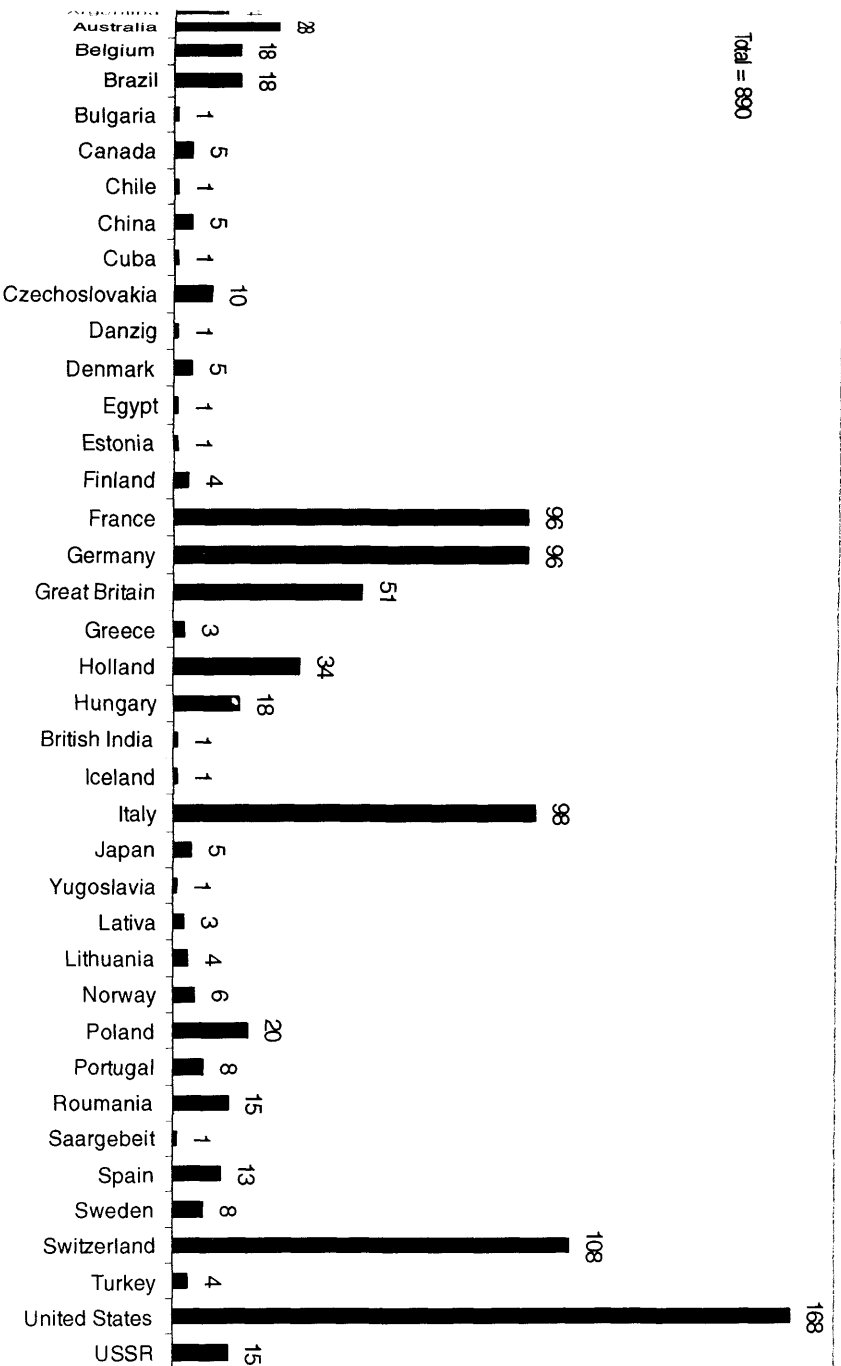
Table D1 – British Delegates to Berne: Metropolitan versus Provincial

Total Members	52
Metropolitan Members	24
Provincial Members	28

Table D2 – British Delegates to Berne

Aberdeen	1
Bath	1
Birmingham	2
Buckinghamshire	1
Cambridge	1
Cardiff	2
Downpatrick	1
Dublin	1
Edinburgh	1
Leeds	2
Lincoln	1
Liverpool	2
London	27
Manchester	3
Newcastle-upon-Tyne	1
Oxford	2
Sheffield	1

Chart D1 – Countries Attending First International Neurological Congress, Bern 1931



Appendix E - Bibliography of the Section of Neurology; *Proceedings of the Royal Society of Medicine*, 1907-1965

The *Proceedings of the Royal Society of Medicine* is an under-utilised, important historical source on twentieth-century British medicine. However, it is not widely available and is therefore infrequently used by historians and sociologists of medicine. Its idiosyncrasies are many: the journal was randomly edited and was indexed only every decade. Its pagination system is not coherent – sometimes each individual Section begins on page 1 and continues until its proceedings are complete, at which point pagination begins again for the next Section. At other times, the journal as a whole is marked from page 1, onwards. Occasionally, both systems are used. Lists of officers, presidential addresses, and special lectures are not always marked as well. Often there is no table of contents explaining where a Section's proceedings can be found within the volumes for the year. In addition, joint meetings between Sections were reported separately in the volumes, making the amount of interaction between the various sections appear less than was the case. Together, these issues are troublesome, because often the record for each year runs to three volumes.

Nonetheless, this journal is a useful, important primary source. Although abstracts were often published, frequently *full transcripts* of discussions (and arguments) were published within the organ. Its discussions and articles also function as a timeline of innovation, technological changes, and medical discoveries within various medical communities. Some examples include: the introduction of new x-ray technologies, electroencephalography, and penicillin. Each left perplexing records in the neurological section's proceedings. Such discussions are interesting and pertinent in science and medical studies, for they reveal always how the acceptance of new methods and treatments (retrospectively seen as naturally accepted) were fraught with contingency and uncertainty.

What follows is a bibliography of the Section of Neurology's proceedings from 1907 until 1964, roughly the parameters of the period of this dissertation. I used it as part of a larger chronology I produced to track 'changes' in neurology throughout the interval of my study. However, I have arranged the bibliography below by the author's last name, feeling that this was the most useful and understandable method of presentation.

Anon. "Section of Ophthalmology and Section of Neurology: Discussion on Tumours of the Optic Nerve," *PRSM*, 1940, 33: 685-692.

Anon. "Meeting at the National Hospital for Nervous Diseases, Queen Square, London," *PRSM*, 1957, 50: 281.

Anon. "Meeting at the West End Hospital for Neurology and Neurosurgery, London," *PRSM*, 1957, 50: 661.

Anon. "Meeting at the National Hospital for Nervous Diseases, Queen Square, London," *PRSM*, 1958, 51: 16.

Anon. "Meeting at the National Hospital for Nervous Diseases, London," *PRSM*, 1959, 52: 210.

Anon. "Meeting at the National Hospital for Nervous Diseases, Queen Square, London," *PRSM*, 1960, 53: 137.

Anon. "Symposium on Disseminated Sclerosis and Allied Conditions: Discussion," *PRSM*, 1960, 54: 10.

Anon. "Joint Meeting May 4-6 1961 with the Societa Italiana di Neurologia at the Royal Society of Medicine and at the National Hospital for Nervous Diseases, Queen Square, London," *PRSM*, 1961, 54: 965-966.

Anon. "Meeting February 2 1961 at the West End Hospital for Neurology and Neurosurgery London," *PRSM*, 1961, 54: 441.

Anon. "Section of Neurology: Water Retention in Migraine," *PRSM*, 1962, 55: 169-171.

Anon. "Meeting November 3 1960 at the National Hospital for Nervous Diseases Queen Square London," *PRSM*, 2005, 54: 382.

W J Adie, "Dystrophy Myotonica *Myotonia Atrophica), an Heredofamilial Disease with Cataract," *PRSM*, 1922, 16: 36-44.

W J Adie, "Case of Dystrophia Myotonica," *PRSM*, 1923, 16: 45.

W J Adie, "Pyknolepsy; A form of Epilepsy in Children with a good Prognosis," *PRSM*, 1923, 17: 19-26.

W J Adie, "Case of Progressive Muscular Atrophy (?) Occurring Forty-two Years after Infantile Paralysis," *PRSM*, 1924, 17: 58.

W J Adie, "Two Cases of Cerebro Macular Degeneration," *PRSM*, 1924, 17: 57-58.

W J Adie, "Specimens Shown at Pathological Meeting: Hemiplegia and Aphasia without Macroscopic Lesion," *PRSM*, 1926, 19: 46.

W J Adie, "Specimens Shown at Pathological Meeting: Suprapituitary Cystic Tumour (Adamantinoma)," *PRSM*, 1926, 19: 46.

W J Adie, "Von Recklinghausen's Disease in Three Generations," *PRSM*, 1926, 19: 11.

W J Adie, "Cases Shown at the Clinical Meeting (Joint Meeting of the American Neurological Association with the Section of Neurology)," *PRSM*, 1927, 20: 1838.

W J Adie, "Cases Shown at the Clinical Meeting (Joint Meeting of the American Neurological Association with the Section of Neurology)," *PRSM*, 1927, 20: 1837.

W J Adie, "Discussion on Disseminated Encephalo-Myelitis," *PRSM*, 1929, 22: 1257-1259.

W J Adie, "Cases Shown at the Clinical Meeting Held at the National Hospital, Queen Square: Hepato-lenticular Degeration," *PRSM*, 1930, 23: 90.

W J Adie, "Cases Shown at the Clinical Meeting Held at the National Hospital, Queen Square: Pineal Syndrome (Ocular Palsies and Precocity) in a Boy of Twelve," *PRSM*, 1930, 23: 90.

W J Adie, "Cases Shown at the Clinical Meeting (Joint Meeting of the American Neurological Association with the Section of Neurology): Congenital Deformity or Old Injury to Cervical Spine: Recent Onset of Paraplegia," *PRSM*, 1937, 20: 1838.

W J Adie and Redvers Ironsides, "A Case of Myotonia occuring in a Male aged 62 (with Cinematograph demonstration)," *PRSM*, 1925, 18: 35.

Edgar Adrian, "Neuritic Type of Progressive Muscular Atrophy," *PRSM*, 1917, 10: 49.

Edgar Adrian, "Disorders of Function in the Neurone," *PRSM*, 1923, 16: 55-60.

Edgar Adrian, "Section of Neurology and Section of Medicine: Discussion on the Functions of the Sympathetic Nervous System," *PRSM*, 1932, 25: 1603.

Edgar Adrian, "The Electrical Activity of the Cortex," *PRSM*, 1935, 29: 197-203.

Edgar Adrian, "Sherrington Memorial Lecture: The Analysis of the Nervous System," *PRSM*, 1957, 50: 991-998.

Edgar Adrian, G Elliot Smith, Edwin Bramwell, Blundell Bankart, Francis Walshe, and Geoffrey Jefferson, "Discussion of the Sympathetic Innervation of Striated Muscle," *PRSM*, 1926, 19: 15-27.

Th Alajouanine, "Joint Meeting with the Societe de Neurologie de Paris: Discussion on Cerebral Oedema," *PRSM*, 1947, 40: 686-688.

N S Alcock, "Clinical Meeting at the National Hospital, Queen Square: Peroneal Muscular Atrophy," *PRSM*, 1933, 27: 1349.

N S Alcock, "Clinical Meeting at the National Hospital, Queen Square: Electrical Injury of the Shoulder," *PRSM*, 1934, 28: 1523.

N S Alcock, "Clinical Meeting at the National Hospital, Queen Square: Increased Intracranial Pressure: Case for Diagnosis," *PRSM*, 1935, 28: 1518-1519.

J W Aldren Turner, "Cases Shown at the National Hospital, Queen Square: Mucocoele of Frontal Sinus," *PRSM*, 1938, 31: 719-720.

J W Aldren Turner, "Cases Shown at the National Hospital, Queen Square: Spasmodic Chorea-Athetosis," *PRSM*, 1938, 31: 719.

J W Aldren Turner, "Cases Shown at the National Hospital, Queen Square: Acute Syphilitic Meningitis Occurring During Treatment," *PRSM*, 1939, 32: 1415-1416.

J W Aldren Turner, "Cases Shown at the National Hospital, Queen Square: Chronic Tetanus," *PRSM*, 1939, 32: 1413.

J W Aldren Turner, "Discussion on the Visual Pathways," *PRSM*, 1944, 37: 395-396.

W Aldren Turner, "Tremor of Uncertain Origin," *PRSM*, 1912, 6: 70-71.

W Aldren Turner, "Case of Myotonia Atrophica," *PRSM*, 1917, 10: 45.

W Aldren Turner, "Case of Tumour of First Dorsal Region of Spinal Cord," *PRSM*, 1917, 10: 44.

W Aldren Turner, "Neuritic Type of Progressive Muscular Atrophy (Charcot-Marie-Tooth)," *PRSM*, 1917, 10: 46.

W Aldren Turner, "President's Address: The Influence of Psychogenic Factors in Nervous Disorders," *PRSM*, 1919, 13: 1-16.

W Aldren Turner, "Case of Disseminated Sclerosis," *PRSM*, 1923, 16: 52.

W Aldren Turner, "Case for Diagnosis," *PRSM*, 1924, 17: 53.

W Aldren Turner, "A Case of Migraine," *PRSM*, 1925, 18: 32.

W Aldren Turner, "Discussion on Epilepsy," *PRSM*, 1927, 27: 865-866.

W Aldren Turner, "Discussion on Epilepsy," *PRSM*, 1927, 20: 855-861.

George L Alexander, "Section of Neurology with Section of Orthopaedics (Joint Discussion): Discussion on Spinal Caries with Paraplegia," *PRSM*, 1946, 39: 730-734.

Leo Alexander, "The Neurologic Examination," in *Medical Diagnosis*, ed. Roscoe L Pullen W B Saunders Co, 1944), pp. 773-820.

I M Allen, "Clinical Meeting Held at the West End Hospital for Diseases of the Nervous System: Bilateral Sixth Nerve Paresis in a Child," *PRSM*, 1928, 21: 1518.

I M Allen, "Clinical Meeting Held at the West End Hospital for Diseases of the Nervous System: Motor Abnormality in a Child. Case for Diagnosis," *PRSM*, 1928, 21: 1516-1517.

I M Allen, "Cases Shown at the Clinical Meeting Held at the National Hospital Queen Square: Familiar Tremor and Spinal Amyotrophy and Cardiovascular Degeneration and Cerebral Thrombosis," *PRSM*, 1929, 22: 594.

I M Allen, "Cases Shown at the Meeting Held at the Hospital for Epilepsy and Paralysis, Maida Vale: Congenital Bilateral Ophthalmoplegia and Facial paralysis with other Congenital Defects," *PRSM*, 1931, 25: 45-46.

R S Allison, "Discussion on the Clinical Consequences of Cerebral Anoxia," *PRSM*, 1957, 47: 609-614.

- R S Allison, "Chronic Amnesic Syndromes in the Elderly," *PRSM*, 1961, 54: 961-965.
- R S Allison, "Symposium on Disseminated Sclerosis and Allied Conditions: Epidemiology of Disseminated Sclerosis," *PRSM*, 1961, 54: 1-4.
- R S Allison, "Section of Neurology. President's Address: Some Neurological Aspects of Medical Geography," *PRSM*, 1963, 56: 71-76.
- Donald Armour, "Clinical Cases: Cervical Caries: Operation and Recovery," *PRSM*, 1907, 1: 64-65.
- Donald Armour, "President's Address: Some Considerations on Head Injuries," *PRSM*, 1929, 22: 11-18.
- Donald Armour, "Discussion on the Diagnosis and Treatment of Acute Head Injuries," *PRSM*, 1931, 25: 760.
- Michael Ashby, "Meeting at the Maida Vale Hospital for Nervous Diseases, London: Spinocerebellar Degeneration," *PRSM*, 1950, 43: 951.
- W J Atkinson, "Excessive Bilateral Sinus Expansion with Mucocoele," *PRSM*, 1955, 48: 181-185.
- Blundell Bankart, "Discussion on Injuries to the Brachial Plexus," *PRSM*, 1930, 23: 1286.
- Josephine Barnes, "Section of Neurology: Obstetrical Complications in Neurological Disorders," *PRSM*, 1962, 55: 575-577.
- Stanley Barnes, "Discussion on Aphasia," *PRSM*, 1920, 14: 33-35.
- Stanley Barnes, "Case of Progressive Lenticular Degeneration and Hepatic Cirrhosis," *PRSM*, 1924, 17: 34-35.
- Y A Barrada, "Pathological Findings in the Central Nervous System in a Case of Myasthenia Gravis," *PRSM*, 1923, 17: 11-18.
- F J F Barrington, "Discussion on the Innervation of the Bladder," *PRSM*, 1931, 25: 557-561.
- F L J Barrington, John Everidge, and A Clifford Morson, "Sections on Urology and Neurology: Discussion on the Treatment of the Paralyzed Bladder," *PRSM*, 1942, 36: 197-198.
- John A V Bates, "Discussion on Volitional Movement," *PRSM*, 1954, 47: 599-600.
- John A V Bates, "Discussion on the Changing Values in Electroencephalography," *PRSM*, 1957, 50: 908-910.
- F E Batten, "Clinical Cases: Tremor of the Right Arm associated with Epilepsy," *PRSM*, 1907, 1: 54-55.
- F E Batten, "Diffuse Sarcomatosis of the Brain and Spinal Cord," *PRSM*, 1908, 2: 12-17.
- F E Batten, "Sequel to a Case of 'Cerebellar Atrophy'," *PRSM*, 1908, 2: 8-12.
- F E Batten, "Two Cases of a Family Disease the Symptoms of which closely resemble Disseminated Sclerosis," *PRSM*, 1908, 2: 35-36.
- F E Batten, "Two Cases of Myotonia Atrophica, showing a peculiar Distribution of Muscular Atrophy," *PRSM*, 1908, 2: 32.
- F E Batten, "Congenital Brain Defect with a Cirious Stamping Gait and Tendency to Fall Backward, suggestive of a Functional Astasia," *PRSM*, 1909, 4: 33-34.
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